BULLETIN

OF

The University of Memphis



Undergraduate Issue

1997 - '99

The **Bulletin of The University of Memphis** is composed of the following publications: *Undergraduate Issue, Graduate Issue, The Cecil C. Humphreys School of Law Issue, and Student Handbook Issue.* All of these publications have been designed to provide current and prospective students, faculty, and staff with a comprehensive description of the university and its academic programs, regulations, services, and activities. Recommendations concerning these publications should be addressed to the Director of Curriculum Planning in the Office of Academic Affairs. A brief description of each publication follows.

The **UNDERGRADUATE ISSUE** contains a detailed description of undergraduate curriculum, admission information, requirements for graduation and academic regulations. The inside front cover of this publication includes policy pertaining to degree requirements. Because students may graduate using the degree requirements from any valid catalog beginning with the year in which they were first admitted to undergraduate study, the issue received upon admission should be retained by the student.

The **GRADUATE ISSUE** contains a description of the university, graduate program requirements and graduate school regulations. Admission requirements, information pertaining to fees and an application form are also included.

The **CECIL C. HUMPHREYS SCHOOL OF LAW ISSUE** contains a description of the degree requirements, admissions requirements, fees and activities of the School of Law. An application form is also provided.

The **STUDENT HANDBOOK ISSUE** provides new students with a brief description of student activities, campus services, policies and procedures related to Student Affairs and the Code of Conduct. Each entering student receives a copy of this publication and is responsible for becoming familiar with the Code of Conduct and the policies and procedures.

The Schedule of Classes (Fall, Spring, and Summer) is an official extension of the **Bulletin** and is published prior to each academic term (Fall, Spring, and Summer). It contains a detailed outline of the registration procedure, individual course offerings (course, time, days, location, and instructor), and course or program revisions made since the publication of the most recent *Undergraduate Issue* and the *Graduate Issue.* It is an official extension of these bulletins. The Academic Calendar listing all deadlines is included in the bulletins and in the *Schedule of Classes.* The Registration Calendar is found in the *Schedule of Classes.*

Directory for Correspondence

Inquiries will receive attention if addressed to the administrative offices below at The University of Memphis, Memphis, Tennessee 38152.

Admission	Director of Admissions
Degree Requirements	Dean of the college in which the degree is offered
Entrance Examination	Director of Admissions
Evaluation of Credits	Director of Admissions
Off-Campus Credit Courses	Assistant Dean for Extended Programs
Financial and Business Affairs	Director of Finance
Graduate Studies	Dean of Graduate Studies
Handicapped Student Services	Director of the Office of Student Disability Services
Housing	Director of University Housing
Pre-Professional Curricula	Dean of the college in which the curriculum is offered
Registration	Office of Registration and Scheduling
Scholarships and Loans	Director of Student Aid
Transcripts	Office of the Registrar
Veterans Services	Coordinator of Veterans Services

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For students whose initial enrollment occurs Fall 1997-Summer 1998, this catalog is valid through Summer 2004; for those whose enrollment occurs Fall 1998-Summer 1999, the validity period ends Summer 2005.

The university reserves the right to cancel or alter any part of this bulletin without notice (subject to the following):

The course offerings and requirements of The University of Memphis are continually under examination and revision. This bulletin presents the offerings and requirements in effect at the time of publication, but is no guarantee that they will not be changed or revoked. The specific courses or activities constituting the degree requirements for any program are subject to substitution at any time prior to completion by the student. This bulletin is not intended to state contractual terms and does not constitute a contract between the student and The University of Memphis.

The University of Memphis reserves the right to make changes as required in course offerings, curricula, academic policies and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions. Current information may be obtained from the offices listed above. Any fees, charges or costs, and all academic regulations set forth in this bulletin are subject to change at any time, and all courses, programs and activities described in this bulletin are subject to cancellation or termination by The University of Memphis or the Tennessee Board of Regents at any time.

The University of Memphis provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines and programs through faculty who, in the opinion of the institution, are trained and qualified for teaching at the college level. However, the acquisition of knowledge by any student is contingent upon the student's desire and ability to learn and the application of appropriate study techniques to any course or program. Thus, The University of Memphis must necessarily limit representation of student preparedness in any field of study to that competency demonstrated at that specific point in time at which appropriate academic measurements were taken to certify course or program completion. (TBR 2:04:00:01)

V. Lane Rawlins, Ph. D.,
President

Cecil C. Humphreys, Ph. D.,
President Emeritus

Thomas G. Carpenter, Ph. D.,
President Emeritus

The eighty-sixth session will open
August 22, 1997

The University of Memphis offers equal educational opportunity to all persons without regard to race, religion, sex, creed, color, national origin or disability. The University does not discriminate on these bases in recruitment and admission of students or in the operation of its programs and activities, as specified by federal laws and regulations. The designated coordinators for University compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 are the Vice President for Student Affairs and the Equal Opportunity Compliance Officer. Information in this document will be provided in alternate format upon request.

The University of Memphis is an Equal Opportunity/Affirmative Action University. It is committed to education of a non-racially identifiable student body.

The University of Memphis is one of 46 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. The TBR is the governing board for this system, which comprises six universities, 14 community colleges and 26 area technology centers. The TBR system enrolls more than 80 percent of all Tennessee students attending public institutions of higher education.

The University of Memphis is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, first professional, master's, educational specialist's, and doctoral degrees.

PHOTO BY GARY CULLY

BULLETIN
OF
The University of Memphis

The University of Memphis
GREAT EXPECTATIONS

Undergraduate Issue

1997 - '99

CAMPUS DIRECTORY

Visit The University of Memphis homepage on the web at *http://www.memphis.edu.*

OFFICE	BUILDING	TELEPHONE (678-XXXX)
Academic Counseling	Scates Hall 107	2062
Add/Drop Courses	See your advisor	
Admissions/Enrollment		
Information	Administration 153	2101
Freshman Information	Administration 229	2111
Transfer Information	Administration 229	2111
Readmission Information		
Undergraduate	Administration 229	2111
Graduate	Administration 311	4489
Graduate Admissions		
Information	Administration 216	2911
Law School Information	Law School 201	2073
International Student	Administration 216	2911
Student Relations	Administration 159	2169
Alumni Association	Alumni Center	2586
Art Museum	Communication & Fine Arts	2224
Athletics (Intercollegiate)	Athletic Office Bldg.	
Men		2335
Women		2315
Bursar's Office	Administration 176	5579
Calendar of Events		
Activities	University Center 214A	2041
Recreation/Intramural Events	Physical Education 155	2811
University Center Events	University Center 214A	2041
Conferences	Fogelman Executive Center 206	3700
Campus School	Campus School	2285
Career Counseling	Scates Hall 120	2068
Center for Athletic Academic Services	Fieldhouse 161	2714
Center for Student Development	Scates Hall 111	2067
Child Care Center	3875 Tiger Paw South	5059
Class Attendance	See your professor	
Computer User Services	Administration 134	8888
Continuing Education	Richardson Towers 10	2381
Counseling		
Academic	Scates Hall 107	2062
Academic Status	Administration 117	2393
Career	Scates Hall 120	2068
Psychological	Scates Hall 120	2068
Dean of Students	University Center 443	2187
Desoto Office	Meeman Journalism 113	2194
Developmental Studies	Administration 205	2028
Drop/Add Courses	See your advisor	
Educational Support Program	Winfield Dunn 143	2704
Emerging Leaders' Program	University Center 427	2093
Employment Placement		
Student (on campus)	Scates Hall 212	3680/3708
Student (off campus)	Health Center 112	2016
University Placement	Scates Hall 315	2239
Teacher Placement	Scates Hall 315	2239
Teacher Certification	Education 204	2728
Evening Services	Administration 119	2671
Extended Programs	Jackson, TN	5087
Financial Aid	Scates Hall 312	4825
Fogelman Executive Center	Fogelman Executive Center 206	3700
Food Services Director	Jones Hall	2112
Fraternity/Sorority Activities	University Center 427	2093
General Education Programs	Jones Hall 406	2783
General Information/University Operator		2000
Grade Appeals	See Catalog & your professor	
Graduate School	Administration 308	2531
Graduate Student Association	University Center 406	4081
Handicapped Student Services	See Student Disability Services	
Helmsman		
Editorial	Meeman Journalism 320B	2192
Business	Meeman Journalism 318	2191
Honors Program	Jones Hall 404	2690
Identification Cards (New and Replacement)	Administration 171	3028
Information Systems	Administration 372	8324
Information System's Help Line	Administration 134	8888
Insurance, Student	Health Center	2287
Intensive English for Internationals	Winfield Dunn 310	2374
International Programs and Study Abroad	Winfield Dunn 300	2814
International Student Advisor	University Center 409	4271
Jackson Center	Jackson, TN	5087
Library	Information	2205
Lost and Found	University Center Information	2041
MINI College	University Center 424	2995
Minority Affairs	University Center 419	2054
New Student Orientation	Administration 159	5513
Operational Assistance	University Center 2981	2013
Organizations, Student	University Center 208	2031
Parking	3918 Central	2212
Photo Services	Meeman Journalism 329	2196
Post Office	Jones Hall 107A	2380
Pre-Law Advisor	Mitchell Hall 207	4821
President's Office	Administration 341	2234
Probation (Academic)	Administration 117	2393
Provost's Office	Administration 372	2119
Psychological Services Center	Psychology 126	2147
Public Safety	Administration 151	4357
Publications Office	Administration 303	2609
Readmission Information		
Undergraduate	Administration 229	2111
Graduate	Administration 311	4489
Registrar	Administration 115	2676
Registration	Administration 119	2671
Religious Affairs	University Center 443	2187
Reservations		
Tennis, Racquetball, Handball		2801
Residence Life	Richardson Towers 011	2295
Director, Reservations, Student Family Housing		2087
Security	Administration 151	4357
Speech and Hearing Center	807 Jefferson Avenue	5800
Speech and Hearing Center—East	South Campus Bldg. #44	2009
Student Academic Records and Information Services	Administration 119	2671
Student Activities Council	University Center 425	2035
Student Aid	Scates Hall 312	4825
Student Affairs	Administration 235	2114
Student Ambassador Board	Administration 323	5314
Student Development	Scates Hall 205	5426
Student Disability Services	Scates Hall 215	2880 (Telephone or TDD)
Student Government Association	University Center 411	2051
Student Health Services	Health Center	2287
Student Organizations	University Center 208	2031
Telephone Service	Jones Hall 101	2999
Testing Center	Health Center 111	2428
Theatre Box Office	Theatre & Communication	2576
Tickets		
General	University Center 117	2043
Athletics	Athletics Office Bldg. 109	2331
Tiger Fund$	Administration 171	3028
Transcripts	Administration 143	3927
Transfer Student Information	Administration 229	2111
University Center		
Operations	University Center 208	2031
Game Room	University Center 111	2085
Information	University Center 214	2041
Vending Refunds	University Center 214	2041
Visitor Information Center	3641 Central Avenue	2040
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1997-98 UNIVERSITY CALENDAR

The calendar is subject to change at any time prior to or during an academic term due to emergencies or causes beyond the reasonable control of the institution, including severe weather, loss of utility services, or orders by federal or state agencies. (TBR 2:04:00:01)

FALL SEMESTER 1997

AUGUST 22: New faculty orientation, 8:30 A.M.

General Faculty meeting, 2:00 p.m.

REGISTRATION, FALL 1997:

For detailed dates and times, see the *Schedule of Classes*.

AUGUST 25: Classes begin.

SEPTEMBER 1: Holiday: Labor Day

SEPTEMBER 24: Last day for removing Summer Session "Incomplete" grades.

OCTOBER 4-7: Fall Break.

OCTOBER 15: Last day to drop courses.

Last day to withdraw from the university.

NOVEMBER 12: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in May, 1998.

NOVEMBER 27-30: Holiday: Thanksgiving.

DECEMBER 3: Classes end.

DECEMBER 4: Study Day.

DECEMBER 5-11: Final examinations.

DECEMBER 13: Commencement.

SPRING SEMESTER 1998

REGISTRATION, SPRING 1998:

For detailed dates and times, see the Schedule of Classes.

JANUARY 16: Classes begin.

JANUARY 19: Holiday: Martin Luther King's Birthday.

JANUARY 27: Last day for removing Fall "Incomplete" grades.

MARCH 6: Last day to drop courses.

Last day to withdraw from the university.

MARCH 14-22: Spring Break.

APRIL 8: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in August 1998.

APRIL 29: Classes end.

APRIL 30: Study Day.

MAY 1-7: Final examinations.

MAY 8: Commencement.

Dead Week. Definition: The four day period preceding final examinations. No student social or athletic functions shall be scheduled during Dead Week.

Study Day. Definition: The day prior to final examinations during most regular semesters. No academic activities shall be scheduled on Study Day. No study or review sessions which the student may feel obligated to attend may be scheduled.

Final Examination Period. No examination shall be given at a time other than the scheduled time except with written permission from the department chair and the college dean. No social or athletic functions shall be scheduled during the Final Examination Period.

Intercollegiate athletics are excepted from the above policies.

1997

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FIRST SUMMER TERM 1998

REGISTRATION, SUMMER 1998:

For detailed dates and times, see the *Schedule of Classes.*

JUNE 8: Classes begin.

JUNE 22: Last day for removing Spring Semester "Incomplete" grades.

JUNE 23: Last day to drop First Summer Term courses.

Last day for First Summer Term students to withdraw.

JULY 3: Holiday: Independence Day.

JULY 9: First Summer Term classes end.

JULY 10: First Summer Term final examinations.

SECOND SUMMER TERM 1998

REGISTRATION, SUMMER 1998:

For detailed dates and times, see the *Schedule of Classes.*

JULY 14: Second Summer Term classes begin.

JULY 23: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in December 1998.

JULY 29: Last day to drop Second Summer Term courses.

Last day for Second Summer Term students to withdraw from the university.

AUGUST 13: Second Summer Term classes end.

AUGUST 14: Second Summer Term final examinations.

AUGUST 16: Commencement.

EXTENDED SUMMER TERM 1998

REGISTRATION, SUMMER 1998:

For detailed dates and times, see the *Schedule of Classes.*

JUNE 8: Classes begin.

JUNE 22: Last day for removing Spring Semester "Incomplete" grades.

JULY 3-6: Holiday: Independence Day and Summer Break.

JULY 13: Last day to drop Extended Summer Term courses.

Last day for Extended Summer Term students to withdraw from the university.

AUGUST 13: Extended Summer Term classes end.

AUGUST 14: Extended Summer Term final examinations.

AUGUST 16: Commencement.

Visit The University of Memphis homepage on the web at *http://www.memphis.edu.*

USING THE CATALOG FOR DEGREE PROGRAM PLANNING

Each student is responsible for fulfilling all of the requirements for the degree program being pursued and for following the procedures and regulations as stated in the *Catalog in effect when entering college.* The *Catalog* is valid for seven years. Students should keep a copy of the *Catalog* they enter under until they graduate. Assistance from an advisor is helpful in planning the program of studies and in selecting the specific courses to be taken for each semester.

The *Graduation from the University* section of the *Catalog* outlines the minimum **university level** degree requirements. Some colleges specify the exact manner in which the university level requirements must be met. In addition to these, the student must fulfill the **college level** requirements for the degree and the **major** requirements. If the admission and/or retention standards for a particular college or department differ from the university requirements, they will be listed in the college degree program description. If they do not, the university requirements apply. The guidelines below will be helpful in planning which program to follow.

(1) Read the *Catalog* to investigate what options are available;
(2) consult with an academic advisor in the Academic Counseling Unit and/or the colleges which offer majors which are of interest to you;
(3) talk with the departmental faculty in these areas of interest;
(4) take advantage of the counseling offerings of the Center for Student Development (Testing, Career Counseling, Academic Counseling, Personal/Psychological Counseling, and the Educational Support Program);
(5) become familiar with the *Academic Regulations* section of the *Catalog*; determine the grades which are needed to insure retention and graduation as well as honors classifications in the university and in individual programs;
(6) if you are undecided about a major area, begin your program of studies with those courses required for all degrees.

After a major has been chosen:

(1) Consult with your advisor to determine what procedures are necessary to declare a major;
(2) read the entire section of the *Catalog* which relates to the degree and major selected: note all degree requirements listed for the college such as the number of hours required within the college and outside the college and the number of upper division hours required; list all the general education courses required for the college or obtain a degree sheet from the college advisor; note the major requirements (when choices are allowed, be sure to consult with your major advisor);
(3) plan your coursework semester by semester; developmental courses and courses required to remove high school deficiencies must be taken during the first two years; try to complete all of your lower division courses (1000-2000) during your first two years; be sure to check for prerequisites before enrolling in any courses, especially upper division courses; take the courses in the proper sequence.
(4) if you change majors, it is essential that you process the change immediately through the advisor for the new major in order to receive appropriate advising and to be able to register (STRIPES).

To complete a 132 semester hour degree program in four years, you need to take 33 hours per year. The maximum allowed per semester (fall/spring) is 20.5 hours. Special permission must be received in order to carry more than 20.5 hours.

1. DESCRIPTION OF THE UNIVERSITY

THE UNIVERSITY OF MEMPHIS STATEMENT OF MISSION

The University of Memphis is a member of the State University and Community College System of Tennessee and is governed by the Tennessee Board of Regents. As an urban university, The University of Memphis provides a stimulating academic environment for its students, including an innovative undergraduate education and excellence in selected research areas and graduate programs. The academic environment extends beyond the campus boundaries to encompass the entire community.

Education is enhanced through exposure to diversity in composition of the student body, faculty, staff, and administrators; including women, minorities, individuals with disabilities, and various age groups and religions. The University has responded to the challenging responsibility of being located in a culturally diverse region by developing a unique blend of teaching, research, and service that contributes to the growth of the Mid-South region.

Teaching brings the benefits of scholarship and research to students and through them to the people of the area. The University of Memphis asserts that excellence in teaching traditional and nontraditional students is its central responsibility. A comprehensive undergraduate education, grounded in the arts and sciences, develops intellectual, cultural, and ethical qualities in its students. The innovative General Education Program challenges students to develop the analytical and critical skills necessary for life-long learning. The University of Memphis offers master's and doctoral degrees in selected graduate programs as well as degrees in the major professional areas. Through learning begun at the University of Memphis, graduates compete in the global intellectual community in which they live.

As a research university, The University of Memphis develops, integrates, disseminates, and applies knowledge. Faculty maintain on-going programs of basic and applied research or creative activities appropriate to their disciplines. The University's urban environment provides a rich opportunity for research and creative scholarship, and for the use of that scholarship in the intellectual and cultural development of the region. The University's commitment to fostering a research and creative environment harmonizes with the other aspects of its mission.

The University of Memphis fulfills its outreach mission through its contributions to professional organizations and to the needs of the community. The University promotes intellectual, cultural, and community development of the region through, for example, its artistic programs, lecture series, technical assistance, continuing education, and intercollegiate athletic programs.

The University of Memphis, through its research, teaching, and outreach roles, responds to individual needs, such as the support of health care and preventive health services. The University addresses broader issues as well, for instance, K-12 education, economic development, environmental initiatives, international programs, computing, and telecommunications.

GENERAL DESCRIPTION

Description of the University

From the opening of its doors in 1912 as a normal school for training teachers to its present status as one of Tennessee's two comprehensive universities, The University of Memphis has been thrust forward by the growth of Memphis and the Mid-South. A town oriented to a rural economy and culture in 1900 grew into a large urban and commercial center mid-century, and the city's public institution of higher learning experienced comparable growth.

The metropolitan and regional requirements for more highly trained university graduates have, of necessity, caused the university to expand all its offerings in arts and sciences, business, the fine arts, education, engineering and technology, law, and several special professional fields. Degrees range from the baccalaureate through the doctorate. Approximately 80 percent of the full-time faculty have earned the highest possible degree in their fields. The university strives to optimize its resources in its quest for excellence through teaching, research and service.

With an enrollment of almost 20,000, The University of Memphis is committed to developing programs of the highest caliber, for only through such a commitment will it be a standard of quality in higher education for the citizens of our service area. As the comprehensive university of the State University and Community College System of Tennessee, The University of Memphis is striving to increase the ratio of doctoral programs it offers, which will also require an increased emphasis on research and scholarship activity. The university is committed to serving a diverse student body of all races, sexes and nationalities. Our students are expected, upon graduation, to be able to compete effectively with their counterparts from any other respected university in the nation.

History

The roots of The University of Memphis date back to September 12, 1912, with the establishment and beginning of classes at West Tennessee State Normal School, which provided for the training of primary and secondary education teachers. However, the seeds for the normal school's creation were sown three years earlier, in 1909, when the Tennessee General Assembly passed a General Education law calling for establishment and maintenance of three normal schools, one school located in each of the three grand divisions of the state.

The eastern edge of Memphis became the site for West Tennessee State Normal School, which in 1929 became West Tennessee State Teachers College. In 1941, the college expanded its liberal arts curriculum, and the name was changed to Memphis State College_an institution serving three to four thousand students. The undergraduate program was reorganized into three schools and a graduate school was added in 1951.

Memphis State achieved university status in 1957, and on July 1, 1994, the name was officially changed to The University of Memphis.

Governing Body

The governance and control of The University of Memphis is vested in the Tennessee Board of Regents. The Board of Regents consists of 18 members including 13 appointed by the Governor; four *ex officio* members—the Governor, Commissioner of Education, Commissioner of Agriculture, and the Executive Director of the Tennessee Higher Education Commission—and one statutory member. One member is appointed from each of the state's nine congressional districts, and three are approved at-large from different geographical areas of the state. A student regent is appointed from one of the system institutions for a one-year term.

Organization

The schools and colleges that make up the university are the Graduate School, the Cecil C. Humphreys School of Law, the University College, the Loewenberg School of Nursing, the School of Audiology and Speech-Language Pathology, and five colleges offering graduate and

undergraduate programs: the College of Arts and Sciences, the Fogelman College of Business and Economics, the College of Communication and Fine Arts, the College of Education, and the Herff College of Engineering. The institution also offers a University Honors Program for highly motivated students seeking exceptional and challenging programs of study in a variety of disciplines. The colleges, departments, and the undergraduate degree programs they offer are described in more detail in the *Colleges and Degree Programs* section of this catalog.

THE MEMPHIS COMMUNITY

Memphis, with a metropolitan area population of just over one million, is one of the South's largest and most attractive cities. As a primary medical, educational, communication, distribution and transportation center, Memphis offers a rich and full range of research opportunities and cultural experiences. The city, known worldwide for its musical heritage, has many fine restaurants, museums, and theaters, as well as one of the nation's largest urban park systems. Annual events include the St. Jude Liberty Bowl Football Classic, the Memphis in May International Festival, the Federal Express St. Jude Golf Classic, the Great River Carnival and the Mid-South Fair. The medical complex in Memphis is the South's largest and one of the nation's foremost centers of medical research. A public transportation system provides easy travel between the university and other parts of the city.

Built on bluffs overlooking the Mississippi River, Memphis is devoted to preserving its history while vigorously building its future. Clusters of stately old homes dot the city; some are still inhabited, others preserve the past as museums, some have been restored and recast into commercial establishments; all are home to images from a long-ago time.

The university's modern and beautifully landscaped campus is centrally located in an attractive residential area of Memphis with shopping, recreation and entertainment centers nearby. In addition to the main campus facilities, the university has research and athletic training facilities and married student housing on the South Campus.

ACADEMIC PROGRAM ACCREDITATION

The University of Memphis is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, first professional, master's, educational specialist's and doctoral degrees. The various colleges, schools and departments and/or the individual programs are accredited by the following appropriate accrediting agencies:

Accreditation Board for Engineering and Technology
Accrediting Commission on Education for Health Sciences Administration
Accrediting Council on Education in Journalism and Mass Communication
American Assembly of Collegiate Schools of Business
American Bar Association
American Chemical Society
American Dietetic Association
American Home Economics Association
American Psychological Association
American Speech-Language-Hearing Association
Council for Accreditation of Counseling and Related Education Programs
Council on Rehabilitation Education
Council on Social Work Education
National Association of Schools of Art and Design
National Association of Schools of Music
National Association of Schools of Public Affairs and Administration
National Association of Schools of Theatre
National Council for Accreditation of Teacher Education
National League for Nursing
Planning Accreditation Board

FACILITIES, RESEARCH, AND SERVICES

Academic Common Market

Participation in the Academic Common Market allows qualified students from southern states to pay in-state tuition while pursuing certain degree programs at The University of Memphis. This arrangement is available only for students whose home states do not offer the designated program. The state in which the student resides determines which of the programs offered by The University of Memphis it will make available to its students.

The Academic Common Market is sponsored by the Southern Regional Education Board (SREB). Participating states are Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia (Florida and Texas grant access for graduate level programs only). Current SREB common market guidelines and requirements may be found on the web at *www.people.memphis.edu/~acadafflib/acm.html*.

Students may request through their home state coordinators that additional programs be made accessible. A list of the state coordinators with their addresses and telephone numbers may be obtained from the Office of Curriculum Planning. (Graduate students should contact the Graduate Admissions Office.)

In addition to certification requirements which the student's state of residence may specify, the following pertain: (1) Students must be fully admitted to a degree program that has been approved as an Academic Common Market program (nondegree students are ineligible); (2) students must obtain a letter certifying residency term of entry and approval for the particular University of Memphis program from their state's Academic Common Market coordinator.

NOTE: After enrollment, students remain eligible for in-state tuition only so long as they are continuously enrolled—consecutive fall and spring terms—in the *same* major for which they were originally certified. If students change major, they must process a *Change of Major* through their advisor and notify the Applicant Services Office to change the Academic Common Market residency code on their records. **Failure to process the Change of Major and to notify applicant services may subject the student to out-of-state fees for all subsequent terms of enrollment in classes for a major other than the one for which the student received ACM certification.** Missing a fall or spring term of enrollment or a change of major requires that the student be recertified through the ACM coordinator in the student's state of residence.

Library Facilities

The University of Memphis Libraries includes the Ned R. McWherter Library and five branch libraries—Audiology and Speech Pathology, Chemistry, Earth Sciences, Mathematics, and Music—contiguous to the appropriate university departments.

The McWherter Library offers many services through its Reference Department, including information retrieval from online databases, CD-ROM searching, indexing the local newspaper, and instruction in use of the library. The Government Publications Department is the Regional Federal Documents Depository for the State of Tennessee, and continues to serve as a depository for all State of Tennessee documents. The Special Collections Department's largest collection, consisting of unique manuscript, cartographic, and photographic materials, and rare books—Mississippi Valley Collection—reflects the history and culture of the Mississippi River valley.

The University of Memphis Libraries' online catalog of its collections is available through terminals in the McWherter Library and the branch libraries. At these terminals users have access, not only to the library's own database of holdings, but to the campus VAX network, the Internet, and to many other electronic resources. Dial-access to the catalog is also available from compatible personal computers.

The University of Memphis Libraries maintains agreements with other local in-

stitutions for shared use of library collections by students, faculty, and staff. These institutions include Rhodes College, LeMoyne-Owen College, Mid-America Baptist Theological Seminary, Memphis Theological Seminary, Shelby State Community College, State Technical Institute at Memphis, the University of Mississippi, and Christian Brothers University.

Information Systems

The University of Memphis provides its students with access to the largest public computing resource in this area. Local area networks (LANS), microcomputers, and terminals are directly connected to an optical fiber based, campus-wide network, and banks of dial-in connections provide limited off-campus modem access. Unblocked third party Internet access is available through the University's *DIALUM* program for a low monthly fee. Client Services (678-8888) can provide detailed information. Special purpose minicomputers and workstations operate in academic departments, and on-campus microcomputers connect the campus to the world via Internet. Currently, centralized computing consists of interconnected, mid-range, Digital Equipment Corporation (DEC) computers running the VMS or UNIX operating system plus a variety of other Digital and Third-party software.

Information Systems (IS) provides computing support for The University of Memphis, its instructional program, and scholarly research. IS departments provide the infrastructure resources and support for the two main categories of computing at the university—academic and administrative.

Client Services (CS), Room 134 of the Administration Building, is responsible for: the maintenance and staffing of Information Systems Help Desks; computer account services, software distribution and license management; maintenance and staffing of student labs; training; software and hardware consulting; and maintenance of software archives. In addition, CS coordinates support activities with key personnel in colleges and academic and administrative units of the university.

The Training Center, Room 414 of the Smith Chemistry Building, provides training on a wide range of computer applications for faculty, staff, students, and administrators. The unit offers microcomputer training on the IBM compatible and Macintosh platforms as well as DEC mainframe utilities.

Academic Systems, Administration Building, Room 136, provides instructional and research computing support and facilitates innovative use of technology for instruction and research for the students, faculty, and staff at The U of M. This unit also provides a range of support for software and numerical databases used in instruction and research for students, faculty, and staff.

The Web Group serves as the central point for information pertaining to the presentation and dissemination of information technology information, particularly as it applies to the World Wide Web.

Administrative Systems supports the development and maintenance of the campus administrative systems.

The Operations Unit manages the university's central computing resources with the goal of providing the university's computing community with fast, stable, and up-to-date hardware and software that meet its information resource needs and to provide timely service to both the administrative and academic user communities.

Network Services provides infrastructure services to support use of telephones, computer networks, cable television, and distance education for the university community.

Fogelman Executive Center

The Fogelman Executive Center is a state-of-the-art conference and training facility designed to meet the needs of executives, managers, and professionals in all organizational areas. The center has fifty-one hotel rooms, fourteen conference and seminar rooms, and two dining rooms.

The staff of the Fogelman Executive Center provides coordination and planning services for all types of conferences and seminars. These services are available to professional level university groups and the Memphis business community.

Bureau of Business and Economic Research

The Bureau of Business and Economic Research is the organized research and public service unit of the Fogelman College of Business and Economics. The programs of the bureau include public service to government agencies (state and local) and the business community, continuing education, and applied general research.

Bureau of Educational Service

The Bureau of Educational Service promotes and supports research, development, evaluation, and field services in the College of Education. Bureau personnel are active in the operation of projects for local, state, regional, and national education agencies. Services are provided to faculty members through staff development, funding source identification, proposal preparation assistance, and contract administration support.

Center for Earthquake Research and Information

The Center for Earthquake Research and Information was established in 1977 by the Tennessee State Legislature to provide the citizens of Tennessee, governmental agencies, and the news media such services as the following: (1) accurate, immediate reports and background information on the occurrence of regional earthquakes; (2) scientific research related to the causes and consequences of local earthquakes and to the possibility of earthquake prediction; (3) studies related to the desirability of earthquake resistant construction; (4) advice to the populace, business, government, and insurance groups on the methods, means, and feasibility of reducing earthquake damage. It operates as a research organization of The University of Memphis. It supports some undergraduate student research in seismology and geophysics and civil engineering and cooperates with the Department of Geological Sciences in offering an undergraduate degree concentration in geophysics.

Center for Electron Microscopy

The Center for Electron Microscopy provides facilities and expertise in the field of electron microscopy. Users of the center include researchers and graduate students in the biological and physical sciences.

Edward J. Meeman Biological Station

The Edward J. Meeman Biological Station was established in 1967 to encourage and foster scientific pursuits in natural history, ecology, and environmental biology. Located about 23 miles northeast of the main campus and adjacent to Meeman-Shelby Forest State Park in northwestern Shelby County, the 623 acre station (with laboratory, classroom, and small conference facilities) provides students and faculty from The University of Memphis, as well as visiting investigators, with a unique site for research, teaching, and service activities. The station is an integral part of the Department of Biology.

Ecological Research Center

The Ecological Research Center (ERC) of the Department of Biology is organized to conduct and coordinate research, teaching, and service activities in ecology and related areas. Major areas of research include: fish culture, water quality, wildlife biology, endangered and threatened species, systematics, and physiological responses of organisms to the environment. The teaching program of the ERC provides a training program for students interested in pursuing careers in various professional fields and affords an opportunity for students to participate in activities involving contemporary environmental problems. Public service activities are primarily directed toward promoting environmental awareness and providing information and consultation services to those concerned with environmental problems.

The Marcus W. Orr Center for the Humanities

The Center for the Humanities was founded in 1987 and renamed in 1991 in memory of Dr. Orr, Professor of History. Its purpose is to support teacher and course development, independent and collaborative research, and public programs that will foster an understanding of the importance of the humanities and establish a sense of intellectual community among humanities faculty at the university. The center sponsors visiting scholars, course development grants, lectures, and a Humanities Fellows Program that supports faculty scholarship.

Center for Manpower Studies

The Center for Manpower Studies, located in the Fogelman College of Business and Economics, conducts research on employment and training-related topics and provides technical assistance to federal, state, and local agencies. It also offers a variety of training programs for human resource development agencies throughout the southeast.

Center for Research on Women

Founded in 1982, the Center for Research on Women, located in the College of Arts and Sciences, has rapidly gained national recognition for its pioneering work on race, class, and gender. Its mission is to promote research in the field of women's studies with a focus on southern women and women of color in the United States. Since its inception, the center has received grants for research and research related activity from both foundation and government sources.

Center for the Study of Higher Education

The Center for the Study of Higher Education, located in the College of Education, conducts research and sponsors workshops and conferences in higher education.

Chucalissa Indian Village and Museum (C. H. Nash Museum)

This partly reconstructed prehistoric Indian village on its original site and the museum are operated by the Department of Anthropology as an educational and research facility. The indoor and outdoor exhibits are designed to reconstruct prehistoric Indian life in the Mid-South. Students are trained in the techniques of excavation, restoration and museum operations. The courses taught are listed in the Department of Anthropology offerings. Chucalissa is located 17 miles from the main campus.

The Institute of Egyptian Art and Archaeology

The institute, founded in 1984 and designated a Tennessee Center of Excellence in 1985, is a component of the Department of Art at The University of Memphis. The institute is dedicated to the study of the art and culture of ancient Egypt through teaching, research, exhibition, and excavation. It is staffed by egyptologists and art historians associated with the department's art history program. Its research library consists of more than 6000 egyptological books and periodicals including precious and out of-print volumes. Supporting the institute's programs is the Art Museum at The University of Memphis, which houses the institute's growing collection of Egyptian antiquities, the largest in the Mid-South. The institute also sponsors an epigraphic project at The Great Hypostyle Hall of the Karnak Temple in Luxor, Egypt.

Institute for Intelligent Systems

The institute is designed to bring together research and training in the broad areas of cognitive science, complex dynamical systems, artificial intelligence, and massively parallel computing (neural computing). Current research includes basic research supported by grants from funding agencies and applied research supported by industrial/governmental contracts. Ideas and techniques for research are gathered from the disciplines of cognitive psychology, computer science, philosophy of mind, neuroscience, linguistics, and mathematics. Training should include graduate courses, thesis and dissertation research, and industrial training in the form of workshops, seminars, and employee research participation.

Regional Economic Development Center

The center represents the university in its outreach function in the field of economic development planning. In providing technical and management assistance to the public and private sectors, the center also serves as a laboratory for interdisciplinary research and service by faculty and graduate students in solving problems of urban and regional development. The center's professional planning staff have academic appointments and teach courses in urban and regional planning.

Speech and Hearing Center

Located at 807 Jefferson Avenue in the medical center of Memphis, this facility became affiliated with the university in 1967. An additional site is located on the South Campus in building #44. Both locations serve children and adults with communication disorders. Students at the university are seen at no charge, while faculty and staff are seen for 50% of normal charges. The university administers and operates the center in cooperation with the Board of Directors of the Memphis Speech and Hearing Center, Inc.

Other Research Units

In addition to the units described above, The University of Memphis also recognizes a wide array of other research oriented units:

- Anthropological Research Center
- Barbara K. Lipman Early Childhood School and Research Institute
- Bureau of Sport and Leisure Commerce
- Center for River Studies
- Center for Health Services Research
- Center for Voluntary Action Research
- Exercise and Sport Science Laboratories
- Federal Express Center for Cycle Time Research
- Groundwater Institute
- Highwater Recording Company
- Institute for Egyptian Art and Archaeology
- Neuropsychology Research Laboratory
- Oral History Research Office
- Prevention Center (joint with UT Memphis)
- Religious News Association Archives
- Robert Wang Center for International Business
- Southern Music Archive
- Transportation Studies Institute
- National Science Foundation Industry/ University Cooperative Research Center for Bio-Surfaces Site

Recognized Centers and Chairs of Excellence

The University of Memphis has been designated by the Tennessee Higher Education Commission as a location for centers and chairs of excellence. The units listed below receive special funding by the State in recognition of their status.

Centers of Excellence

- Center for Applied Psychological Research
- Center for Earthquake Research and Information
- Center for Research Initiatives and Strategies for the Communicatively Impaired
- Center for Research in Educational Policy
- Center of Excellence in Egyptian Art and Archaeology

Chairs of Excellence
Accounting (2)
Art History
Biomedical Engineering (2)
Combinatoric Mathematics
Economics and Managerial Journalism
English
Finance
Free Enterprise Management
International Business
International Economics
Judaic Studies
Law
Management Information Systems
Molecular Biology
Nursing
Philosophy
Real Estate
Sales
Urban Education

Evaluation Services

Evaluation Services, which is located in the John Willard Brister Library building, conducts the university program for student evaluation of instruction, collecting, analyzing, and reporting student perceptions of classroom instruction. Each fall and spring semester, faculty are offered the opportunity to participate and to indicate classes to be surveyed. After the semester ends, the completed forms and a computer summary of student reactions are returned to the faculty. These documents, which form an important part of the dossier prepared for promotion and tenure, provide information useful to individual faculty in ongoing course development and improvement of instruction.

Jackson Center

Located on the campus of Jackson State Community College, the Jackson Center offers a wide variety of undergraduate and graduate courses and degree programs to students living in the Jackson area. In addition, the Jackson Center houses the Office of Extended Programs, which coordinates course and program delivery at various locations in West Tennessee. The Jackson Center is administered through the Office of the Vice Provost for Extended Programs.

Higher Education Alliance

This alliance provides cooperative service through The University of Memphis, Jackson State Community College, and the State Area Vocational-Technical School at Crump. Reporting through the Office of the Vice Provost for Extended Programs and located at the State Area Vocational-Technical School at Crump, it offers an array of undergraduate and graduate courses to students in its service area.

Psychological Services Center

The Psychological Services Center, located on the first floor of the Psychology Building, offers both psychological evaluations and therapeutic services to children and adults. For appointments or information, contact the center.

Alumni

The University of Memphis Alumni Association has offices located in the Alumni Center on campus. The staff serves The University of Memphis Alumni Association and provides a communication linkage to the university for graduates and former students. The Alumni Association and staff also offer special services for current students and serve as the sponsors for the university's Student Ambassador Board.

Development

The Office of Development serves as a procurer and coordinator for private charitable financial support of The University of Memphis academic programs. With approximately 46 percent of the university's annual operating budget provided by the state of Tennessee, other income must be generated by student tuition, other fees, and through annual and endowed gifts from individuals, corporations and foundations. Such income is used to initiate new academic programs and enrich existing ones.

The University of Memphis Foundation

The University of Memphis Foundation, a 501(c)(3) organization, was established to support The University of Memphis' mission. The foundation is governed by a volunteer Board of Directors. Committees, including an Investment Committee, review the foundation's financial position quarterly. An outside consultant also advises the Investment Committee on portfolio management, the selection of investment managers and allocation issues pertaining to fixed income and equities.

The University of Memphis Foundation is a major vehicle for developing and accepting private gifts to The University of Memphis. The University of Memphis desires that all private support be made payable to *The University of Memphis Foundation.* The foundation manages over 300 endowment accounts and distributes income to the university and its colleges, schools, departments, programs and projects to promote academic enrichment. Sources of funds to the foundation are contributed by alumni, friends, parents, corporations and foundations. Outright gifts, trusts and bequests are received by the foundation. General accounts, as well as named accounts, are established to provide: financial assistance to students, faculty support and just about every need The University of Memphis may have. All contributions should be made payable to *The University of Memphis Foundation.* Any particular fund or department designation can be noted on the memo line or on supporting correspondence.

Oak Ridge Associated Universities

Since 1971, students and faculty of The University of Memphis have benefited from the university's membership in Oak Ridge Associated Universities (ORAU), a consortium of colleges and universities and a management and operating contractor for the United States Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education, the DOE facility that ORAU manages, undergraduates, gradu- ates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of under represented minority students pursuing degrees in science- and engineering-related disciplines.

A comprehensive listing of the Oak Ridge Institute for Science and Education programs and other opportunities, their disciplines, and details on locations and benefits can be obtained in the Office of the Vice Provost for Research and the Graduate School, Administration Building, Room 308.

Public Service

In recognition of the university's responsibility to serve the needs of a changing social and economic order, the Office of Public Service serves as a prime contact for individuals and organizations outside the university. Through this office, access may be gained to university facilities and resources. Public Service is administered through the Office of the Vice Provost for Extended Programs.

Tennessee Small Business Development Center

The Tennessee Small Business Development Center is organized to provide business development services to new and existing small business firms throughout the state of Tennessee. These services are delivered through service centers located at various state universities, community colleges, and technical institutes. These services add to the economic development efforts of the local communities by adding and retaining employment. Special attention is given to women, minority, and veteran-owned businesses. This office functions as a department under the Vice Provost for Extended Programs.

Continuing Education Short Course Program

The Continuing Education Short Course Program serves as an important link to the Memphis community, providing comprehensive, non-credit programs ranging from career development to personal enrichment. The program is designed to narrow the education gap left by the degree-awarding academic programs at The University of Memphis, thus complementing the university's mission of service to the community. The program is strongly service-oriented, providing general interest instruction to learners of all ages, regardless of their educational background. The Short Course Continuing Education product is high quality, affordable, and requires no formal admission to the university. This office reports through the Office of the Vice Provost for Extended Programs.

Clean Tennessee

The Clean Tennessee program, established in 1983, serves as the state Keep America Beautiful agency and state resource center for litter prevention and proper solid waste management education. Functioning as a department under the Vice Provost for Extended Programs, Clean Tennessee is funded by Tennessee Department of Transportation.

THE GRADUATE SCHOOL

The Graduate School of The University of Memphis is the center of advanced study and research within the university. The basic objectives of the Graduate School are as follows:

1. to preserve and disseminate knowledge;
2. to extend knowledge through research; and
3. to prepare men and women to assume responsible and useful roles in a changing society.

The Doctor of Philosophy degree is awarded in audiology and speech pathology, biology, biomedical engineering, business administration, chemistry, communications, counseling psychology, engineering, geophysics, history, mathematics, music, philosophy, and psychology. The degrees of Doctor of Education and Doctor of Musical Arts are awarded by the College of Education and the College of Communication and Fine Arts, respectively. The College of Education also offers the degree of Education Specialist with a major in education. The Cecil C. Humphreys School of Law offers the Juris Doctor degree.

Master's degrees are offered in forty-three major areas through five colleges and one independent school. The degrees include Master of Science, Master of Arts, Master of Fine Arts, Master of Arts in Teaching, Master of Education, Master of Business Administration, Master of Music, Master of City and Regional Planning, Master of Health Administration, and Master of Public Administration.

Visit the Graduate School homepage on the web at *http://www.people.memphis.edu/~gradsch/*

CECIL C. HUMPHREYS SCHOOL OF LAW

PROGRAM: The Cecil C. Humphreys School of Law offers a program of instruction leading to the degree of Juris Doctor.

A student may enroll only in the fall semester and on a full-time or part-time basis. A student regularly employed more than 20 hours per week may not pursue the full-time program.

The successful completion of 90 semester hours of work, including all required courses, with the prescribed grade average is necessary for graduation. Unless an exception is granted, the last two regular semesters' work must be taken in this school.

ADMISSION: Admission to the Cecil C. Humphreys School of Law is on a selective basis. To be eligible for admission, a student must have received a bachelor's degree from an accredited college or university and must have made a satisfactory score on the Law School Admission Test administered by the Law School Admissions Services, Box 2000, Newtown, PA 18940. Questions concerning additional admissions requirements should be directed to the Director of Law Admissions and Recruitment.

The regulations and policies of the School of Law are set out in greater detail in a separate issue of the *Law School Bulletin.* Additional information can be obtained by contacting Law Admissions, 3715 Central Avenue, Memphis, TN 38152.

Visit the Cecil C. Humphreys School of Law homepage on the web at *http://www.people.memphis.edu/~law/*

2. SERVICES TO STUDENTS

ENROLLMENT SERVICES

Enrollment Services aims to provide "excellence in service with a personal touch" for all students enrolled at The University of Memphis. We seek to provide services that are pleasant, friendly, effective, efficient, and without lines.

Included in Enrollment Services are: Office of Admissions; Office of Student Relations and Orientation Services; Office of Student Financial Aid (including the University Scholarship Program); Office of the Registrar (including an Evening Branch Office); and the Adult Student Development Office (including MINI College, Child Care Center, and Adult Student Services).

1. ADMISSIONS

ADMISSION TO THE UNIVERSITY

The University of Memphis offers equal educational opportunity to all persons without regard to race, religion, sex, creed, color, national origin, or disability. Inquiries about admission to any college of the university should be addressed to the Office of Admissions. This office receives and processes all applications, evaluates credentials, and issues notices of acceptance to qualified students. Undergraduate students may enter at the beginning of either of the fall or spring semesters or at the beginning of any term of the summer session.

The University of Memphis encourages all those who feel they can benefit from the educational opportunities offered by the institution to file an application for admission. Consideration is given to age, educational background, entrance examination scores, high school grades, any college attendance, and any other special talents and/or special circumstances which may affect the applicant's academic performance.

Certain instructional programs of the university are subject to special admission requirements and are subject to change according to the availability of institutional resources. Students wishing to enter one of these programs of study should check with the appropriate department or division offering the program in order to become familiar with these special requirements. Undergraduate programs with special admission requirements include, but are not limited to, professional degrees in art, music, or theatre (Bachelor of Fine Arts or Bachelor of Music), teacher education, educational services, nursing, and the University College.

Students are encouraged to apply as early as possible. Early admission contributes to better orientation, course planning, class scheduling and financial aid consideration. High school students planning to apply as freshmen should submit applications as soon as possible after completion of the junior year. Applications for admission are available from many secondary school/guidance counseling offices and from the Office of Admissions, The University of Memphis, Memphis, TN 38152. All credentials become the property of the university and cannot be forwarded or returned.

Credentials will be maintained in active files for a 12-month period. After this period, credentials will be relegated to inactive status and must be submitted again before an admission decision can be made.

Regulations in this section are subject to change without notice.

ADMISSION AS DEGREE-SEEKING UNDERGRADUATES

The deadlines for submitting applications for admission are: August 1 for the fall semester, December 1 for the spring semester, and May 1 for the summer session. Applications received after these deadlines may be delayed in processing or processed at the non-degree level.

Freshman Applicants

An applicant who has *no* previous college enrollment may be considered for admission as a regular undergraduate freshman by submitting the following to the Admissions Office:

1. A final transcript of all high school credits: Early decisions can be made by submitting partial transcripts (6th or 7th semester). Transcripts carried by the student are not acceptable for the admissions file. If any courses have been taken for college credit, the institution(s) granting credit must be contacted and asked to send an official transcript to The University of Memphis, Office of Admissions.

   Graduates of an unapproved or non-accredited high school must take the General Educational Development (GED) test and earn an average standard score of at least 45. This GED requirement is waived for students who earn the minimum ACT required for guaranteed admission. However, the GED may be advisable for students who graduated in 1989 or thereafter from an unapproved or nonapproved high school and are deficient in one or more of the required high school courses. Students who have achieved a high school diploma through the General Education Development (GED) Test must also have the GED scores sent to the Office of Admissions. Students who do not present one unit of American History are required to register for the course during their first or second year at the university.
2. The score report of the American College Testing program (ACT) or the Scholastic Aptitude Test (SAT): The score report is a necessary part of the application and the test date should be no more than three years old at the time of enrollment.

   Applicants who are offered admission with the ACT composite, English or math subscores less than 19 will be required to take a placement examination prior to enrollment. Based on the results of the assessment, these applicants may be required to successfully complete remedial and/or developmental courses prior to enrolling in degree credit courses. (See Remedial and Developmental Studies program description in the *Independent Programs* section of this catalog.)
3. A non-refundable application fee of $5.00.
4. Any additional items and information requested in the application materials by the Office of Admissions.

Students will be considered for admission with a minimum high school grade point average of 2.00 on a 4.00 scale or a 19 composite score on the ACT.

Students will be *guaranteed* admission with a 3.0 cumulative grade point average on a 4.0 scale from an accredited or approved high school or a minimum ACT composite score of 20 *and* satisfactory completion of the required high school curriculum.

The average high school grade point average for the entering class of 1996 is 3.02, and the average ACT composite is 22.3.

Applicants with *special talents or circumstances* who do not meet requirements for guaranteed admission may be considered. For further information contact the Office of Admissions. Applicants with diagnosed learning disabilities should contact the Director of the Office for Students with Disabilities for further information.

High School Curriculum Required For Admission

No high school curriculum can assure that a given student will acquire desired learning outcomes; however, the absence of certain components greatly increases the likelihood that the student will not acquire those outcomes and reduces the likelihood that the student will enjoy maximum benefits of a college experience. The justification for colleges' recommending or requiring specific high school units for admission is to reduce the likelihood that a student will be unprepared for effective work in college and to increase maximum benefits a student may enjoy.

Effective the Fall Semester 1989, among the units required for graduation, the following specific high school units must be included in the minimum admissions requirements at all Tennessee State Board of Regents universities and colleges. **Students who do not take one or more of these required courses, where they are available, may not be eligible for admission to the university.**

ENGLISH (4 units required): Units in this category must address reading and literature, writing, speaking and listening, and principles concerning the English language. Extensive experience in reading and writing should characterize all courses.

VISUAL AND/OR PERFORMING ARTS (1 unit required): Units in this category should include a survey of the arts (visual arts, theater, music, and dance) or active participation in one or more of the arts.

MATHEMATICS (3 units required): Units in this category must include Algebra I, Algebra II, and geometry or an advanced course with geometry as a major component. Students are recommended to take a fourth unit in computing, advanced mathematics, or statistics. All college freshmen will benefit by having studied mathematics as seniors.

NATURAL AND PHYSICAL SCIENCES (2 units required): Units in this category must include mathematical skills, fundamental concepts, and some laboratory and field work. At least one unit must address detailed knowledge in the more traditional fields of biology, chemistry, or physics and must include a laboratory.

SOCIAL STUDIES (2 units required): For students graduating prior to spring 1993, the units in this category may include: history, government, geography, economics, sociology, psychology, or anthropology. For students graduating in the spring 1993 or thereafter, these units must come from the following: modern history, ancient history, world history, world geography, or European history. One unit in American History is also required.

FOREIGN LANGUAGE (2 units required): Two units in a single foreign language are required in this category.

These stipulated high school units are not intended to specify what the total high school curriculum should be. Secondary schools seek to meet the needs of various student clienteles, one of which is the college-bound student. The stipulations are, on the other hand, an attempt to make a strategic application of academic competencies. They reflect the bridge from specific desired learning outcomes to a list of required college admission criteria. That list is composed of high school units presumed most likely to result in the required learning outcomes. For the sake of clarity, one unit constitutes one year of high school study of a given subject.

Applicants with subject deficiencies may, with proper institutional approvals, be admitted to the university; however, the deficiencies must be removed during the first 64 semester hours (30 semester hours for transfer students) of college enrollment. College level courses taken to remove unit deficiencies must be completed with a grade of C or better and will be used for elective credit only. Different requirements may be specified for certain groups of applicants: adult students (i.e., students separated from high school graduation by three or more years), GED students who are not high school graduates, and international students. Transfer and re-entry students may be required to remove any deficiencies before regular admission.

OUT-OF-STATE APPLICANTS

Acceptance to the university for out-of-state applicants who meet guaranteed admission standards may be granted on the same basis as for in-state applicants. Acceptance for all other out-of-state applicants is competitive.

Out-of-state applicants who qualify for and participate in the University Honors Program may qualify for a waiver of the out-of-state tuition differential.

EARLY ADMISSION APPLICANTS

Academically outstanding high school juniors who have completed three academic years of high school, accumulating at least 14 units of course work may be considered for early admission if they have the following:

1. A minimum high school cumulative grade point average (GPA) of 3.5 on a 4.00 scale.
2. A minimum ACT composite score of 26 on the enhanced ACT or the equivalent on the former ACT.
3. Written recommendations from high school principal and guidance counselor.
4. An interview with U of M faculty/staff committee selecting early admission students.

In addition, they must agree to enroll in freshman English, and, unless successfully completed in high school, courses in American history and economics.

NOTE: Early admission applicants should also check with their high school for specific graduation requirements.

Transfer Applicants

The University of Memphis welcomes applications from students who have begun college elsewhere. They may transfer to The University of Memphis with any number of units. If they have fifteen (15) or more semester units transferable from a fully accredited college or university, students are evaluated primarily on college-level work. If they have fewer than fifteen (15) transferable units, students are evaluated on a combination of college level and high school course work, and college entrance examination results.

To qualify for degree-seeking transfer admission, the applicant must request that a transcript from each institution attended be sent directly to the Office of Admissions. Transfer applicants who graduated from high school in 1989 or later may also be subject to the high school curriculum requirements found above in this section of the catalog. To make this determination, a high school transcript is necessary. Therefore, all transfer applicants whose high school graduation date was in 1989 or later should have a transcript mailed directly from their high school to the Admissions Office. Concealment of previous college or university attendance may be cause for rejection or cancellation of admission.

Admission may be granted to applicants who have honorable dismissal from the last institution attended and whose cumulative grade point average (GPA) meets the required minimum established by the Tennessee State Board of Regents, as stated below:

Semester Hours Attempted	Minimum GPA
14.99 or less	No minimum*
15.00—29.99	1.40
30.00—50.99	1.70
51.00—67.99	1.90
68.00 and above	2.00

* Transfer applicants with fewer than 15.00 earned semester hours must meet the admission requirements for freshman applicants.

Transfer applicants who have been academically dismissed from the last institution they attended *or* do not meet the GPA requirements listed above, will not be considered for admission until at least one regular semester (not to include summer sessions) has elapsed. After this period, these applicants must provide the following:

A. a new application (no additional fee required), and

B. an acceptable ACT or SAT score.

NOTE: Applicants who meet one of the criteria outlined in the Adult Students section do not have to submit an acceptable ACT or SAT score.

If acceptance to the university is granted, the applicant will be admitted on academic probation. Students on probation at their previous school will continue in that academic status.

Transfer applicants who are denied admission should contact the Applicant Services section of the Office of Admissions to discuss the possibilities of attending the university in the future.

Adult Students

The University of Memphis encourages the enrollment of adult students. In order to facilitate this, the university offers additional support services and alternative admission policies to promote the enrollment of the mature student. These services include but are not limited to evening and week-end classes through the MINI College. The Adult Student Development Office offers child care during class attendance, tutoring programs, the Adult Student Association and much more.

In addition, adult students generally are not required to provide an entrance examination for admission. They may, however, be expected to complete a placement instrument depending on individual circumstances.

Adult students are those applicants who meet one of the following criteria:

1. at least 24 years of age
2. at least 21 years of age and have been away from school for some time.

For further information, please contact the Adult Student Development Office in Room 419 in the University Center.

Servicemembers Opportunity Colleges (ConAP Program)

The University of Memphis is a participant in the Servicemembers Opportunity Colleges (SOC) partnership. Under this agreement and through the Concurrent Admissions Program (ConAP), people enlisting in the armed forces can be admitted to a college and/or university at the same time as their enlistment. Eligible soldiers can be admitted to college on a full or provisional basis, with enrollment deferred for up to two years after completion of active military service or initial active-duty for training. When their tour of military duty has been completed, they will not have to go through additional

paperwork to enter the university. Enrollment of a student who, subsequent to this agreement, attempts college coursework elsewhere is subject to academic performance standards stated in the catalog. In addition to the concurrent admissions, the last 25-hour residency requirement of the university has been waived for participants. More information can be obtained through the Director of Admissions Office, The University of Memphis.

International Students

The University of Memphis believes that the presence of a balanced representation of international students on campus will enrich the educational environment of all students. Therefore, the university is authorized under federal law to enroll nonimmigrant, alien students on "F-1" and "J-1" student visas. Applicants must file complete credentials before May 1 for fall admission; September 15 for spring admission; or February 1 for summer admission. Complete credentials include all the documents listed below under "Requirements."

The international application should be completed carefully and returned to the Office of Admissions, The University of Memphis, Memphis, Tennessee, 38152, U.S.A. Applications and fees received after the stated deadlines will be returned.

A non-refundable international application and processing fee of $30.00 (thirty dollars) is required of every international applicant, unless previously paid. A check or money order, made payable to The University of Memphis, must be sent with the application form. Applications received without the fee will be returned.

International applicants should write to the Office of Admissions for information on application procedures, qualifications, and admission to the university. Since there is considerable variation among educational systems throughout the world, international applicants will be selected on a competitive basis, after meeting the minimum standards of admission using examination scores, grade point average, relevance of academic background to intended major field of study and recommendations from the World Education Series. The university often receives more applications than can be approved; therefore, admission cannot be granted to all applicants who meet only the minimum requirements.

Since the enrollment of international students is based on a global sampling and representation, priority will be given to applicants with exceptional credentials who will be attending a university in the United States for the first time.

All transcripts, test scores, and other credentials must be accompanied by an official English translation of these documents and must be on file in the Office of Admissions by the stated deadlines before the beginning of registration for the intended term of entry.

REQUIREMENTS

1. Educational Background: Applicants must list on the form provided by the university every school attended, beginning with primary school, to the present, including each primary, secondary, and post secondary institution.

2. Required Transcripts: Applicants must arrange for the Office of Admissions to receive official copies of academic records from the applicant's attendance at secondary school, college, university, and professional institutions of learning. These transcripts must be sent directly from the high school or college to The University of Memphis. An exception is made for those who hold the bachelor's degree or its equivalent in that they need not send their secondary school records. Records should list the subjects studied and the grade, mark, or other evidence that each individual subject was completed to the satisfaction of the authorities in charge. If it Is impossible for the school to send us an official copy, copies certified by an official at the American Embassy or a known world organization may be acceptable. All records must be in English. Since certificates and records filed for examination are not ordinarily returned, applicants should send certified photostatic copies if the documents in question cannot be easily replaced.

3. Required Test of All Applicants: All applicants whose native language is not English must supply results of the Test of English as a Foreign Language (TOEFL) or its equivalent. TOEFL information may be obtained by writing: TOEFL, Educational Testing Service, Princeton, New Jersey, 08540, U.S.A. All test scores must be sent directly from the testing agency to The University of Memphis.

4. Freshman Test Required: Applicants to the first year undergraduate level must submit scores on the Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT). These tests are available only in English. For information on the SAT, applicants may write to College Entrance Examination Board, Box 592, Princeton, New Jersey, 08540, U.S.A. For information on the ACT, applicants may write to American College Testing Program, P.O. Box 414, Iowa City, Iowa, 52243, U.S.A. All test scores must be sent directly from the testing agency to The University of Memphis.

5. Financial Statement: U.S. visa regulations require that certification of admission be based on both academic acceptance and satisfactory evidence of adequate funds to meet the expenses involved in the student's program of study. Applicants on an "F-1" student visa must supply, on the form provided by the university, sufficient evidence of financial support for themselves and all members of their families who will accompany them to Memphis. This requires that applicants certify that their intent is to attend the university full time and that no employment will be required.

6. Applicants must send two recent passport size photos of themselves to the Office of Admissions, The University of Memphis, Memphis, Tennessee, 38152, U.S.A.

7. Health Certificate Required: Each international student, within 30 days from the first day of classes, must submit a certificate from a licensed U.S. physician or other qualified U.S. medical authority verifying freedom from tuberculosis. Failure to do so shall result in denial of enrollment. In the event that the student either has tuberculosis or has potential tuberculosis requiring medical treatment, continued enrollment will be conditioned upon the determination by a licensed U.S. physician that such enrollment does not present a risk to others and upon the student's compliance with any prescribed medical treatment program.

In order to enroll, all international students born after January, 1957, must prove that they have been inoculated with the live measles vaccine (MMR) **since January, 1980.** Exceptions are made for students who are pregnant or allergic to the vaccine.

8. All international students must purchase a health insurance policy through the university or provide evidence of government sponsored health insurance before they are allowed to enroll.

9. English Placement Examination: All international applicants who are accepted must take an English placement examination, administered by the English Department, before enrollment. Placement in an English class will be determined by the results of this examination. International students should arrange to be on campus approximately one week before the beginning of Regular Registration for the proposed term of entry.

10. International students will not normally be allowed to register as transient students (those regularly enrolled and in good standing at another institution who desire to attend The University of Memphis for only a limited period of time). During summer sessions, exceptions may be granted only in cases where a student has an outstanding academic record and unusual circumstances are present.

11. International students who wish to apply for readmission to the university must meet the deadlines stated above.

12. International students must become familiar with the regulations of the Immigration and Naturalization Service and assume responsibility for complying with these regulations.

13. International students should be prepared to attend a four- to five-day mandatory orientation prior to the first day of class.

Combination Senior

An undergraduate student with a total cumulative GPA of at least 3.25, who has filed with his or her graduation analyst a plan for completing the bachelor's degree within two semesters, with the approval of the college director of graduate studies, may request to enroll concurrently in undergraduate and selected graduate courses. Students may earn up to 12 hours of graduate credit while enrolled as a Combination Senior. Approval to register for graduate credit does not imply approval for admission into a graduate program at the university or that the credit earned will be accepted towards a graduate degree. After the bachelor's degree is awarded, a Combination Senior may be admitted to a graduate degree program. Courses taken for graduate credit may not be used for both the baccalaureate and graduate degrees.

Former Students (Readmission)

Former undergraduate students who wish to return to the university at the same level as when they previously attended and have missed any academic term excluding summer, must file an application for readmission. This form should be secured, completed, and returned to the Admissions Office. If the student has enrolled at another institution since last attending The University of Memphis, a transcript must be forwarded to the Admissions Office. An applicant will receive favorable consideration only if eligible for readmission under all university regulations, including the grade point average (GPA) for transfer students. (NOTE: International students who wish to apply for readmission to the university must meet the deadlines for new admission for international students.)

ADMISSION AS NON-DEGREE UNDERGRADUATES

Applicants who wish to apply at this level are encouraged to apply by the deadlines as stated for degree-seeking students. Applications will be accepted until the first day of regular registration for the term for which the student is applying. Non-degree students who have attended other colleges will not have their previous

college work evaluated for transfer until such time as they have been approved for admission as regular undergraduates.

Applicants wishing to enter the university, and *who are not presently pursuing a degree*, may do so by applying for admission at this level.

Those applicants who are admitted as non-degree students are not required to have an advisor. However, if non-degree students desire an advisor, they are assigned to the Academic Counseling Unit for advising. Non-degree undergraduate students may not take more than 18 semester hours of work in a single term nor may they earn more than 24 semester hours total. This limit may be extended if there has been enrollment at another institution since last attending The University of Memphis.

NOTE: Transient students (those regularly enrolled and in good standing at another institution who desire to attend The University of Memphis for only a limited period of time) should apply at the non-degree level.

Applicants with College Degree

Applicants who (1) have earned a baccalaureate degree from an accredited institution; (2) desire to take only a limited number of undergraduate courses; and (3) are not presently working toward a degree at The University of Memphis, may be admitted as non-degree students.

Non-degree students may, at any time within the stated deadlines, apply to the Office of Admissions for reclassification as degree-seeking students, effective at the beginning of the next fall or spring semester. Admission procedures and requirements are the same as those for degree-seeking undergraduate applicants with the following clarifications:

1. An acceptable entrance examination score or the equivalent may be required for students wishing to have their level changed to degree-seeking undergraduate status. Applicants who do not meet one of the criteria outlined in the Adult Students section may chose one of the following to complete this requirement:
   a. Submitting an acceptable ACT or SAT score.
   OR
   b. Earn at The University of Memphis a cumulative GPA of 2.00 or greater that includes 12 hours or more exclusive of physical activity courses.

NOTE: Courses defined as remedial or developmental may not be used in satisfying the 2.00 requirement.

2. The high school graduation requirement may be satisfied by any one of the methods listed in the regular undergraduate freshman section of this catalog.

After students are admitted as regular undergraduates, any credit that they may have earned as non-degree-seeking students may apply toward degree programs in the college from which a degree is sought as outlined in this catalog.

Concurrent Enrollment

Outstanding high school students who have completed the junior year may be admitted and register for one college course per term of enrollment concurrently during their senior year provided they supply evidence of the following:

1. A minimum high school cumulative grade point average (GPA) of 3.20 on a 4.00 scale.
2. An ACT composite score of 22 or above.
3. A recommendation from the applicant's high school principal or guidance counselor.
4. The course concurrently enrolled students register for must be taken outside of their established school day.

NOTE: Departments may establish additional criteria for their courses.

Admission as Audit-Only Undergraduate

Persons who are not enrolled for credit courses may register for audit courses with the approval of the Office of Admissions and the appropriate department chair. These students must have the equivalent of high school graduation or be at least 18 years of age. Clearance will be for one term only. Subsequent enrollment will require an application for readmission. Those who are suffering from a permanent disability that totally incapacitates them from working at an occupation that brings in an income, and persons sixty years of age or older, who are domiciled in Tennessee, may audit courses at The University of Memphis without paying tuition charges, maintenance fees, student activity fees, or registration fees. Admission to audit will be limited on an individual classroom basis according to space availability.

NEW STUDENT ORIENTATION, ADVISING AND REGISTRATION

The academic year consists of two semesters: the fall semester beginning in late August or early September and ending in December; and the spring semester beginning in January and ending in May. A summer session is held between the end of the spring semester and the beginning of the fall semester of the next academic year.

An orientation and academic advising program for all new freshmen is held during the summer. The sessions are conducted to acquaint entering students with various programs of study, general university regulations, and registration procedures. Students are assigned advisors who aid them in selecting appropriate courses. **Assistance from the advisor, however, does not relieve students of the responsibility of studying the catalog and fulfilling all of the requirements therein** for the specific degree program being pursued. Before students attain senior standing, they should consult with the college level advisor or degree analyst of the college regarding fulfillment of requirements for their chosen degree.

A first-time freshman—full-time or parttime—whose ACT composite score, mathematics subscore, or English subscore *used for admission to the university* is less than 19 must undergo course placement testing prior to enrollment in the university. Students must enroll in and complete any required Remedial/Developmental Studies courses before enrolling in college-level courses in related areas.

The *Schedule of Classes*, published before the beginning of each semester, contains a detailed outline of the registration procedures and course changes and additions made since the publication of the Catalog. Students are urged to study these schedules carefully and keep them available for immediate reference during the registration period and throughout the semester. Continuing students register in November for Spring and in April for Summer and Fall. New students are provided an opportunity to register at New Student Orientation programs. A late registration fee is charged beginning the first day of classes, and there is no reduction in other fees.

In no case is credit allowed in any course for which students are not duly registered and which is not entered properly on the official registration material. Registration is not complete until all fees for the semester have been paid.

NOTE: Please refer to the Schedule of Classes for further information and registration procedures.

2. STUDENT AID

The university Student Financial Aid Office provides financial assistance for students in the form of scholarships, grants loans and student employment. This office counsels with students about college expenses and financial aid opportunities.

All applicants for financial assistance must submit the Free Application for Federal Student Aid (FAFSA) plus any other supporting documents requested by the Student Aid Office. All undergraduate students applying for financial aid must apply for the Federal PELL Grant Program. All required forms may be obtained through the Student Aid Office upon request. The FAFSA is also available in most high school guidance offices.

The preferred application deadline for fall semester is April 1. For the spring semester the preferred application date is November 1. Applications are acknowledged as they are received, and award notices are mailed when all documents are received, usually in early spring for the fall semester. All awards are made on an academic award year basis. All students must reapply for financial aid each year.

SCHOLARSHIPS

The university awards several hundred academic scholarships each year in varying amounts up to $6,600.00. However, most scholarships awarded are awarded to cover the amount of in-state registra-

tion fees. Scholastic achievement, leadership qualities, and need are factors utilized in evaluating applicants.

Scholarships are awarded for the academic year and are not available for summer school. Freshmen applying for scholarships must rank in the top twenty five percent of their high school graduating classes. Currently enrolled students must have at least a 2.5 overall grade point average, and must be enrolled full-time. Current students wishing to be considered for a General University Scholarship must submit a new application each year. The General University Scholarship deadline date is March 1. However, some scholarships have an earlier deadline. Information may be obtained from the Scholarship Office, Room 204, Scates Hall.

THE FEDERAL TAX REFORM ACT OF 1986 significantly changed the tax status of scholarships, fellowships, and grants received from the university. Prior to the Act, they generally were not subject to income tax. Since then, scholarship, fellowship, and grant amounts exceeding tuition, fees, course-related books, supplies, and equipment have become taxable.

DISTINGUISHED SCHOLARSHIP PROGRAMS

Distinguished scholarships are awarded annually to entering freshmen with outstanding scholastic records without regard to financial need. The deadline to apply for distinguished scholarships is January 15.

All National Merit and National Achievement Semi-Finalists will receive $1,000 per year in addition to any academic scholarship they are awarded.

The University of Memphis offers the following distinguished scholarships:

The Cecil C. Humphreys Merit Scholarship

The merit scholarship program offers a four-year, renewable scholarship on a competitive basis to those national merit finalist students who indicate The University of Memphis as their first choice university with the National Merit Scholarship Corporation. The award provides in-state registration fees, a campus housing allowance, an annual book stipend, and a meal allowance. Recipients must live on campus to receive a campus housing allowance and meal allowance.

The Cecil C. Humphreys Presidential Scholars Program

The Presidential Scholars Program offers a four-year renewable scholarship on a competitive basis for those students who have a minimum of 30 on the ACT or 1320 on the SAT with a 3.25 or better high school grade point average. The award covers in-state registration fees, a campus housing allowance, and book stipend. Eligible candidates are interviewed for evidence of sound character and demonstrated leadership in co-curricular activities. Recipients must maintain a 3.00 GPA the first year and a 3.25 GPA every semester thereafter and complete a 10-hour-per-year service requirement. Scholarship award is adjusted if student does not reside on campus.

The Cecil C. Humphreys Herff Engineering Scholarship

The scholarship is awarded to a freshman engineering major who has a minimum ACT of 30 or a 1320 SAT. Eligible candidates are interviewed in February. This award pays in-state registration fees, a book stipend, and an on campus housing allowance.

Academic Excellence Scholarship

The Academic Excellence Scholarship is a four-year renewable scholarship awarded on a competitive basis to academically talented students with outstanding leadership and achievement records. The award amount varies from $2,800 to $3,000. Applicants must score at least 30 on the ACT or a 1320 on the SAT and have a 3.25 high school GPA. All Academic Excellence Scholarship recipients must satisfy the academic program service requirement of 20 hours annually. In addition to the annual service requirements, Academic Excellence Scholars have to maintain a 3.0 GPA the first year, and a 3.25 GPA each semester thereafter.

The Early Scholars Scholarship Program

The Early Scholars Scholarship Program is a guaranteed scholarship open only to beginning freshmen who will enroll for the fall term. The student must apply and be accepted for admission by January 15. Students who have a minimum 30 ACT or 1200 SAT with a high school GPA of 3.50 or better will automatically qualify for the yearly cost of in-state registration fees and an annual book stipend. Continued eligibility will be based on maintaining a 3.0 cumulative GPA each semester and completing a 30-hour service requirement each academic year. The scholarship is renewable for four years of undergraduate study.

Non-Resident Academic Scholarship Program

This competitive scholarship is awarded to in-coming freshmen with a non-resident admission status who have a minimum ACT score of 30 or a SAT of 1320 (ACT of 27 or a SAT of 1200 for African-Americans) and a high school GPA of at least 3.25. All recipients of the program will be awarded the yearly cost of in-state registration fees, out-of-state tuition, and an annual book stipend. Continued eligibility will be based on maintaining a cumulative 3.00 GPA each semester and completing a 30-hour service requirement each academic year.

TRANSFER SCHOLARSHIPS

COMMUNITY COLLEGE TRANSFER SCHOLARSHIPS are awarded on a competitive basis to students transferring to The University of Memphis from a community college who have earned an Associate's Degree with a minimum cumulative GPA of 3.5. The award covers yearly cost of in-state registration fees and provides a yearly book stipend. Recipients are required to maintain a minimum cumulative GPA of 2.8 and complete a service requirement of thirty (30) hours per year. Preference is given to graduates of Tennessee community colleges.

COMMUNITY COLLEGE MINORITY TRANSFER SCHOLARSHIPS are awarded on a competitive basis to African-American students transferring to The University of Memphis from a community college who have earned an Associate's Degree with a minimum cumulative GPA of 2.8. The award covers the yearly cost of in-state registration fees and provides a yearly book stipend. Recipients are required to maintain a minimum cumulative GPA of 2.8 and complete a service requirement of thirty (30) hours per year. Preference is given to graduates of Tennessee community colleges.

THE COMMUNITY COLLEGE PRESIDENTIAL SCHOLARSHIP is awarded to the student recommended by the president of each of Tennessee's community colleges. The award covers the yearly cost of in-state registration fees. Recipients must maintain a cumulative GPA of 2.8.

GENERAL SCHOLARSHIPS

THE U of M REGENTS SCHOLARSHIP is awarded on a competitive basis to incoming freshmen who are Tennessee residents and have scored a minimum of 26 on the ACT (or a 1170 SAT) and have a minimum high school GPA of 3.0. The award covers the yearly cost of in-state registration fees, and is renewable for up to four (4) years with the maintenance of a 2.8 cumulative GPA and the completion of a thirty (30) hour per semester service requirement.

VALEDICTORIAN SCHOLARSHIP The University of Memphis Alumni Association provides a Valedictorian Scholarship for the top scholar from each of Tennessee's accredited or state approved high schools. The qualifications for this program are that the recipients must rank number one in their class and meet the admission requirements of the university. The award covers yearly in-state registration fees, and is renewable with a 3.0 cumulative grade point average.

THE OUTSTANDING MERIT MINORITY SCHOLARSHIP provides scholarship assistance to African-American Tennessee residents who have outstanding records of academic and leadership abilities Students will be selected on the basis of a minimum ACT of 20 or SAT 930 and a high school GPA of 3.0. The award covers yearly in-state registration fees and an annual book stipend. All recipients must fulfill the 30-hour per semester work requirement. Continued eligibility will be based on completing 24 credit hours each academic year and maintaining a minimum of a 2.8 GPA each year.

EMERGING LEADERS SCHOLARSHIPS are given annually to students from Tennessee high schools. The scholarships cover in-state registration fees and a yearly book stipend. Interested candidates need to submit a portfolio reflecting their high school leadership activities and two letters or recommendation. Inquiries should be made to the Dean of Students' Office, The University of Memphis, Memphis, TN 38152.

ADULT SCHOLARSHIP is a competitive scholarship awarded to incoming students who are 24 years of age or older. Candidates must be Tennessee residents, and selection will be based upon academic achievement, community involvement, professional goals, and financial need. The scholarship, which covers in-state registration fees, is renewable with the maintenance of a 2.5 GPA, and service to the university. Preference is given to returning adults with no prior credits or less than 25 credit hours. The application deadline is April 15 and students must complete the Free Application for Federal Student Aid.

THE GENERAL UNIVERSITY SCHOLARSHIP FUND provides scholarships varying in amount and duration to outstanding students.

THE TAYLOR AND MARY RICHARDSON SCHOLARSHIP is awarded to a graduate of Lake County High School in Tiptonville, TN. Applicants must apply and be accepted as freshmen, demonstrate academic ability, and financial need.

THE JOHN W. AND MYRTLE P. RICHARDSON SCHOLARSHIP is awarded to students in the upper quartile of their high school class who show a need for financial assistance. The scholarship may be awarded to a student already enrolled at U of M. The recipient must maintain a 3.0 GPA. The award covers in-state registration fees.

THE R. C. ANDERSON SCHOLARSHIP is restricted to male students between the ages of 18 and 24 from Benton, Decatur, and Henderson counties in Tennessee. The award covers the yearly cost of in-state registration fees. Selection will be made

on the basis of the quality of high school performance with particular attention given to ACT scores.

THE U of M UNIVERSITY WIVES SCHOLARSHIP is awarded to an upcoming junior level female student based on academic achievement. The recipient cannot be awarded any other scholarship in the same year.

THE JAMES E. McGEHEE MORTGAGE COMPANY SCHOLARSHIP is awarded to an outstanding high school graduate who has demonstrated academic achievement. Financial need may be considered. The recipient must be a Shelby County resident.

THE UNIVERSITY OF MEMPHIS FACULTY/STAFF SCHOLARSHIP is awarded to entering freshmen and/or currently enrolled students who are the children or the spouses of current U of M Faculty-Staff. Entering freshmen must have a minimum ACT score ot 20 and a high school GPA of at least 3.0. Currently enrolled students must have been enrolled at U of M tor two previous semesters and have a minimum cumulative GPA of 3.0. All students must have demonstrated leadership, school, and community activities

THE HORACE H. WILLIS MEMORIAL SCHOLARSHIP is awarded to an incoming treshman on the basis of need for financial assistance and evidence of academic promise. The recipient must be a graduate of a Memphis City School and must have been in the upper 25% of his class.

THE LESLIE GRUBER SCHOLARSHIP is awarded annually to an incoming Tennessee high school graduate who has shown academic ability of at least a 3.0 GPA on a 4.0 scale, and financial need.

THE MEMPHIS HIGH SCHOOL ALUMNI SCHOLARSHIP is for graduates of Memphis high schools only. The recipient must demonstrate academic ability. Financial need may be considered.

THE JERRY N. BOONE AWARD is awarded to a student currently enrolled at The University of Memphis who is in good standing academically and demonstrates financial need. Recommendations from a dean or department head is required. Available to transter students.

THE BILLY J. MURPHY SCHOLARSHIP was established in 1974 to honor former U of M Athletic Director, Billy J. Murphy, for his long service to the school. The award is made to a Memphis area student who has demonstrated financial need and shows scholastic ability.

THE ABE WALDAUER MEMORIAL SCHOLARSHIP provides one scholarship to a Shelby County resident who demonstrates exceptional academic achievement and tinancial need.

THE JAMES McCLENDON HIGHLAND 100 SCHOLARSHIP is awarded to a Memphis area high school graduate who has demonstrated financial need and academic potential.

THE HENRY M. AND LENA MEYER KAHN SCHOLARSHIP is awarded to students who score 21 or above on the ACT and have a high school GPA of 3.0 or above. Preference is given to students ot Jewish faith.

THE JOHN WILCOX SCHOLARSHIP is awarded to one freshman, sophomore, junior, and senior at The University of Memphis. The recipients must maintain a 2.5 overall GPA.

MIKE DRIVER SCHOLARSHIP is awarded to full-time students demonstrating academic achievement, leadership ability, and potential for future promise and leadership. Freshman recipients must maintain a 2.5 GPA. Preference may be given but not restricted to male students from White Station High School.

THE DR. MARTIN L. KING JR. SCHOLARSHIP is awarded to students based on academic merit and leadership in social justice and human rights activities in the community and at The University of Memphis. A minimum cumulative GPA of 2.75 is required.

THE THELMA M. AND RICHARD L. LYNCH SR. SCHOLARSHIP is awarded to students who are United States citizens and Shelby County residents. A minimum cumulative GPA of 2.50 is required. Preference shall be given to students exhibiting financial need.

EXCHANGE CLUB OF EAST MEMPHIS/ALLEN SHACKELFORD SCHOLARSHIP is awarded to a hearing impaired or deaf student who is enrolled fulltime. If no qualitied applicant is chosen, the award is to go to a student training to be a teacher of the deaf.

LUTHER C. McCLELLAN ALUMNI CHAPTER MINORITY SCHOLARSHIP is awarded to a full-time student with a minimum cumulative GPA of 2.5. Applicant must submit letter ot recommendation. Financial need and participation in extracurricular activities may be considered. Atrican-American students may be given special consideration.

FISHER-MAHER is awarded to a full-time undergraduate student enrolled at The University of Memphis with a minimum GPA of 2.8. Financial need will be considered.

FURR-BOWMEN is awarded to a deserving student who meets admission and retention requirements of the university. Financial need may be considered.

THE JUDGE BERNICE DONALD SCHOLARSHIP is funded by the Rho Gamma Chapter of Zeta Phi Beta Sorority. It is awarded to an undergraduate student with a cumulative GPA of at least 2.80. The student must be classitied as at least a sophomore. United States citizenship is required. Financial need shall be considered. Special consideration may be given to Atrican-American females.

THE FLORA RAWLS MEMORIAL SCHOLARSHIP is awarded to undergraduate students with financial need. Freshman recipients must have been in the upper half of their high school class. A minimum cumulative GPA of 3.00 is required and must be maintained.

THE MILTON ADDINGTON SCHOLARSHIP is awarded for outstanding achievement in the field of psychology.

PHI MU SCHOLARSHIP is awarded to a full-time student with a cumulative GPA of 2.70 who is active in the Phi Mu Sorority. Student cannot be the recipient of any other academic scholarship.

SMITH AND NEPHEW RICHARDS SCHOLARSHIP is awarded to a full-time junior or senior with a minimum GPA of 2.80.

SHADRACK GRANT is awarded to a full-time undergraduate who does not qualify for Title IV aid. Student must be in good academic standing.

THE SAM BOSWELL LEADERSHIP SCHOLARSHIP is awarded to a current sophomore, junior, or senior with a minimum GPA of 2.0. Nominations are made to the Alumni Office.

THE HERFF LEADERSHIP SCHOLARSHIP is awarded to entering freshmen based on leadership and letters of recommendation from high school or current students with cumulative GPA of 2.5 who do not qualify for existing scholarships. Recipient must maintain a 2.5 GPA in college and complete 30 hours of service to the university in a leadership capacity per semester.

THE DAVID COLLINS-OMICRON DELTA KAPPA SCHOLARSHIP is awarded to a voting member ot The University of Memphis Omicron Delta Kappa who demonstrates exceptional leadership. Recipient must expect to receive a baccalaureate degree from The University of Memphis during the year of scholarship receipt and must enroll in graduate/professional school at The University of Memphis immediately following graduation with a baccalaureate degree

HARRAH'S ENTERTAINMENT, INC. MINORITY SCHOLARSHIP is a four-year renewable scholarship that is awarded to a minority student who is a first-time freshman with an ACT of 25 or SAT equivalent and HS grade point average of at least 3.25. Leadership, community involvement and financial need are also considered. Recipient must maintain a 3.0 GPA, pursue a course of study that will enhance employability at Harrah's Entertainment Inc.

THE COLLEGE OF ARTS AND SCIENCES

THE BELLE McWILLIAMS SCHOLARSHIP recipient must be enrolled in the College of Arts and Sciences, demonstrate an above average interest in American history, have diverse extracurricular activities, and demonstrate outstanding academic achievement. The recipient must be a sophomore or above with at least a 3.0 GPA.

THE CARROLL BOWMAN SCHOLARSHIP is awarded to a philosophy major with demonstrated financial need and academic potential.

THE OPPORTUNITY FOUNDATION PAUL SCHWARTZ SCHOLARSHIP is awarded to social work majors who are seniors with a 2.5 minimum GPA

THE BOTANY SCHOLARSHIP is awarded to a student studying botany or biology at The University of Memphis.

THE LOUNSBURY GEOLOGY SCHOLARSHIP is awarded to sophomores, juniors, and seniors enrolled full-time who have a cumulative GPA of at least 3.0. The recipients must be majoring in geology, with preference given to students interested in oil and gas exploration.

THE DR. PAUL H. SISCO SR. MEMORIAL SCHOLARSHIP is awarded to full-time students majoring in geography. A minimum GPA of 2.50 is required

THE MARY PETTUS MEMORIAL SCHOLARSHIP is awarded to a full-time upperclassman majoring in Foreign Languages with a minimum cumulative GPA of 3.0.

THE MATHEMATICAL SCIENCES SCHOLARSHIP is an award given to an incoming freshman who has declared a major in a mathematical science. All awards are four-year renewable. To be eligible a student must have an ACT score of 26 or better, or a comparable SAT score, and a high school average ot at least 3.25, with a good record in mathematics.

THE R. P. AND DOROTHY CLARK SCHOLARSHIP is awarded to an outstanding junior majoring in mathematical sciences. Emphasis for the award is based on academic merit rather than financial need.

THE SIGMA TAU DELTA SCHOLARSHIP is awarded to an outstanding senior for graduate study in English at The University of Memphis.

THE MARCUS W. ORR HUMANITIES SCHOLARSHIP, established by former students and friends ot Dr. Orr to honor his outstanding contributions to the university, is awarded annually to a student majoring in one of the humanities.

THE OMAR E. SMITH SCHOLARSHIP in biology is awarded to outstanding juniors and seniors majoring in biology with emphasis in ecology. Students should apply during their sophomore year.

THE PRISCILLA RUSHTON SCHOLARSHIP is awarded to a full-time biology major who has demonstrated academic achievement, leadership ability, and strong potential for professional success.

THE EDWARD T. BROWNE SCHOLARSHIP is awarded to a full-time biology major who has demonstrated academic achievement, leadership ability, and strong potential for professional success.

THE MILTON ADDINGTON SCHOLARSHIP is awarded on the basis of outstanding achievement in the field of psychology at The University of Memphis.

THE KALTENBORNS MATHEMATICS SCHOLARSHIP is awarded to an undergraduate majoring in mathematical sciences with at least a 3.0 GPA. Recipient must complete 15 semester hours of coursework, maintaining a 3.5 GPA in all math courses.

THE JOHN MALMO ADVERTISING, INC. SCHOLARSHIP is awarded to English and marketing students who desire to pursue careers in advertising or public relations. Financial need is considered. Recipients must be U.S. citizens.

ELIZABETH PHILLIPS SCHOLARSHIP is awarded to a junior or senior African-American English major with a minimum GPA of 2.5.

ALBERT H. WOOLLETT SCHOLARSHIP is awarded to a student majoring in Physics. Renewable if student maintains a GPA of 3.0. Financial need may also be considered.

DR. NASEEB SHAHEEN SCHOLARSHIP is awarded to a sophomore, junior, or senior with a GPA of at least 2.5 who is majoring in Chemistry, Physics, or Mathematics with plans to teach at the high school level. Recipient must be a Tennessee resident.

CRIMINOLOGY AND CRIMINAL JUSTICE SCHOLARSHIP is awarded to sophomore, junior or senior majoring in Criminology and Criminal Justice with a minimum GPA of 3.0.

THE FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS

THE THOMAS Y. OWEN SCHOLARSHIP is awarded to an accounting major demonstrating both financial need and outstanding academic achievement. A minimum cumulative GPA of 3.00 must be maintained. U.S. residency is required.

THE ETHEL LEWIS SCHOLARSHIP is sponsored by the University Career Women of The University of Memphis. The scholarship is available to a junior or senior student majoring in office administration or preparing for a career as a business teacher. The recipient must be a resident of Tennessee for at least the two previous semesters and must have a cumulative GPA of 3.0 or above.

THE DR. R. W. JENNINGS SCHOLARSHIP, a memorial to a former U of M faculty member, provides financial assistance to students in office administration. The recipient must have a GPA ot at least 3.0 and an ACT score of at least 18 and must be a resident ot Memphis or Shelby County and a graduate of a Memphis or Shelby County high school. Financial need may be a consideration.

THE JOHN ELKINGTON SCHOLARSHIP in land use development is awarded to a junior student with a minimum GPA of 3.25 majoring in real estate or an allied discipline. Preference is given to a student with a career interest in the land use development field.

THE RISK AND INSURANCE MANAGEMENT SOCIETY SCHOLARSHIP is awarded to students classified as at least juniors. Recipients must have a minimum cumulative GPA of 2.60 and a major in risk management or insurance management.

THE MEMPHIS BOARD OF REALTORS/MARK SOWARDS MEMORIAL SCHOLARSHIP is awarded to students who are majoring in real estate or an allied discipline. A minimum cumulative GPA of 2.50 is required.

JOHN MALMO ADVERTISING, INC. SCHOLARSHIP is awarded to English and marketing students who desire to pursue careers in advertising or public relations. Financial need is considered. The recipient must be a U.S citizen.

SHELBY GROUP INTERNATIONAL ENDOWED SCHOLARSHIP FUND is awarded to a full-time student majoring in business with a minimum of 3.0 GPA. Freshmen with a 3.5 GPA from high school are eligible.

THE S. L. KOPALD SCHOLARSHIP is awarded to students who are graduates of a Memphis City or Shelby County high school. Incoming treshmen must have a minimum ACT score of 26. The recipient must be majoring in marketing, and must maintain a minimum GPA of 3.00.

THE ELEANOR O'NEILL SCHOLARSHIP is awarded to students majoring in advertising, public relations or journalism. Academic merit is considered. The recipient must be a full-time student and maintain a cumulative GPA of at least a 2.80.

FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS ALUMNI SCHOLARSHIP awarded to a junior or senior business major with a 3.0 GPA.

THE E. I. CRAWFORD/DELTA SIGMA PI SCHOLARSHIP is awarded to a full-time student in good standing in the Fogelman College of Business and Economics with a minimum cumulative 2.25 GPA. The recipient must be nominated by the Gamma Zeta Chapter of the Delta Sigma Pi Fraternity and is selected by a committee.

THE SHELTON AND BRUCENE HARRISON SCHOLARSHIP is awarded to entering freshmen as well as currently enrolled

students majoring in either marketing or management. Entering freshmen must have been in the upper third of their high school class. All recipients must maintain a minimum cumulative GPA of 3.0. Preference shall be given to students in need of financial assistance.

WATKINS, WATKINS, AND KEENAN ACCOUNTING SCHOLARSHIP AWARD is awarded to accounting majors enrolled in the School of Accountancy. The students must have a 3.0 minimum GPA both overall and in Accounting courses. Candidates for the scholarship shall have demonstrated academic merit and interpersonal, communication and leadership skills. If there are equally qualified candidates on the above criteria, students demonstrating financial need will have priority.

CHARLES W. GRIESBECK ACCOUNTING SCHOLARSHIP (formerly REYNOLDS, BONE AND GRIESBECK ACCOUNTING SCHOLARS AWARD) is awarded to full-time students enrolled in the School of Accountancy. The students must have at least a 3.0 undergraduate minimum GPA overall. Selection can take into consideration ACT, SAT and GMAT scores. Recipients must demonstrate academic merit and interpersonal, communication and leadership skills.

THE SEDGWICK JAMES, INC. SCHOLARSHIP is awarded to a junior majoring in finance, insurance and risk management, marketing or accounting. Must be a full-time student with a minimum of 3.0 GPA overall and a 3.6 GPA in the major.

THE INTERNATIONAL ASSOCIATION FOR FINANCIAL PLANNING SCHOLARSHIP is awarded to a junior or senior interested in a career in financial planning; cumulative undergraduate GPA of 3.0; graduate GPA of 3.25.

ACCOUNTANCY ENRICHMENT FUND SCHOLARSHIP is awarded to an accounting major who has a 3.0 GPA and who has completed ACCT 2010.

TIM TREADWELL III/UNION PLANTERS SCHOLARSHIP is awarded to an outstanding junior or senior who is majoring in property or casualty insurance, banking, business or closely related subject. The recipient must be a U.S. citizen and a Tennessee resident.

JOHN TULLY/UNION PLANTERS SCHOLARSHIP is awarded to a full-time junior or senior majoring in banking or some area in business with a cumulative 3.0 GPA. The student must be a U.S. citizen and Tennessee resident.

ANDREW M. WRAY III MEMORIAL SCHOLARSHIP is awarded to a full-time junior or senior enrolled in the College of Business and Economics with an interest in Financial Planning and have a 3.0 minimum GPA overall. The recipient must be a U.S. citizen.

GOLDSMITH DEPARTMENT STORE SCHOLARSHIP is awarded to a student majoring in business with an ACT of 28 and a high school GPA of 3.0. Special consideration is given to applicants from Shelby County, West Tennessee and other areas served by Goldsmith's Department Stores. Renewable if recipient maintains a 3.0 GPA and is enrolled full-time in the Fogelman College of Business and Economics.

THE COLLEGE OF COMMUNICATION AND FINE ARTS

(Awarding of scholarships, in several cases, is contingent upon donor funding)

THE AL DUNNING MEMORIAL SCHOLARSHIP is awarded to students majoring in journalism.

THE VARIETY CLUB-ROBERT S. JOHNSON SCHOLARSHIP was endowed in 1974 to honor the late noted writer for the Memphis Press Scimitar. A scholarship is given to a junior or senior majoring in journalism who is seeking a career in some phase of that profession. Both financial need and scholarship are factors in the selection of the recipient. The recipient must be a graduate of a Memphis area high school.

THE JOHN PAUL JONES JOURNALISM SCHOLARSHIP provides a scholarship in journalism to a minority student of academic merit in financial need.

JOURNALISM ALUMNI SCHOLARSHIPS are awarded to undergraduates and graduate students majoring in journalism.

FRANK AHLGREN SCHOLARSHIP is awarded to a news editorial journalism major.

MEMPHIS GRIDIRON SHOW INC. SCHOLARSHIPS are awarded to undergraduate students at The University of Memphis who have an interest in music or journalism.

THE JOURNALISM SCHOLARSHIP is awarded to a student with a declared major in journalism.

ISAAC HAYES EVENING OF SOUL SCHOLARSHIPS are awarded to students majoring in theatre and dance on the basis of financial need and who have demonstrated competence in theatre arts, with special emphasis placed on African-American theatre.

THE ETHEL T. MAXWELL VOICE SCHOLARSHIP is given to a voice major in the applied music degree program, Bachelor of Music. Incoming freshmen must be in the upper quartile of their high school class and have a demonstrated voice talent.

THE HERBERT HERMANN MEMORIAL PIANO SCHOLARSHIP is awarded to a pianist with at least a 20 ACT score or a 3.0 GPA. Auditions for jury board exams will be considered. The scholarship selection is coordinated by the Music Department piano faculty and the Scholarship Office.

THE BAND ALUMNI SCHOLARSHIP FUND is awarded by the Board of Directors of the Band Alumni Chapter from candidates recommended by the band faculty. The student must be a music major with a GPA of at least 2.50.

MARCHING BAND SCHOLARSHIPS are awarded to students to participate in the University Marching Band. These awards are based on audition and previous marching band experience, regardless of academic major. Application and audition schedules are available in the band office. Scholarships are renewable with satisfactory performance.

SPEECH AND DRAMA SCHOLARSHIPS are awarded to students majoring in theatre and dance on the basis of need and promising talent.

THE MUSIC ALUMNI SCHOLARSHIP is funded for the purpose of providing scholarships for students in the Music Department.

THE SCRIPPS-HOWARD FOUNDATION, EDWARD J. MEEMAN SCHOLARSHIP is awarded to a junior or senior student in journalism who intends to enter the field of newspaper journalism. Student must show academic ability and financial need.

THE MEMPHIS AREA RADIO STATIONS SCHOLARSHIP is awarded to an outstanding undergraduate in the area of broadcasting. The student must be a music major with a GPA of at least 2.50. Academic merit will be considered and financial need may be a consideration as well.

THE ELBA GANDY MEMORIAL MUSIC SCHOLARSHIP is awarded to a student studying music at The University of Memphis.

THE BILLY M. JONES SCHOLARSHIP is awarded to a student studying and/or working in an area that relates to community relations. This would qualify any undergraduate student studying in marketing, commercial art or any discipline within the College of Communication and Fine Arts.

THE PRESSER AWARD is awarded to a junior majoring in music. Award is given at the beginning of student's senior year.

THE CLEMENT SANTI MEMORIAL SCHOLARSHIP is awarded to a full-time student majoring in either music or dramatic arts. Recipient is selected by a committee.

THE SPECIAL MUSIC SCHOLARSHIP is awarded to an undergraduate music major at the University of Memphis on the basis of merit.

THE WREG-TV / U of M BAND DAY SCHOLARSHIP is awarded annually to a student pursuing an undergraduate degree in music.

THE KEITH KENNEDY SCHOLARSHIP may be awarded annually to majors in theatre and dance on the basis of talent and theatrical achievement.

THE DONALD AND MARY VAUGHN ART SCHOLARSHIP provides a scholarship in art to a freshman of academic merit in academic need.

THE ART DIRECTORS CLUB OF MEMPHIS SCHOLARSHIP is awarded annually to an outstanding art major with a concentration in graphic design and a GPA of at least 3.0. Selection is based on portfolio review.

THE DANA D. JOHNSON ART SCHOLARSHIP is awarded annually to an outstanding sophomore, junior, or senior majoring in art with a concentration in fine arts, art history, or art education. A minimum cumulative GPA of 3.0 is required, and preference is given to a student with exceptional portfolio work if recipient is majoring in studio art.

THE FRANCES FALLS AUSTIN SCHOLARSHIP is awarded to an incoming freshman pursuing an undergraduate degree in art. Preference is given to a student with exceptional portfolio work

THE MARY MARGARET ROSS ART ALUMNI SCHOLARSHIP is awarded annually by the Art Alumni Chapter to an outstanding art major with a minimum cumulative GPA of 3.0.

THE INTERIOR DESIGN ALUMNI SCHOLARSHIP is awarded annually by the interior design alumni to an outstanding junior or senior Interior design major with a minimum cumulative GPA of 3.0.

THE KIX-106 SCHOLARSHIP is awarded to students majoring In communication who have a 3.0 GPA or are in the top 25% of their high school graduating class. Recipients must maintain full-time status.

THE WHRK-K-97 RADIO STATION SCHOLARSHIP is awarded to African-American students majoring in communication with a concentration in broadcasting who have a demonstrated record in radio. Recipients must have graduated from a Memphis or Shelby County high school with a GPA of at least 3.00 or have an U of M GPA of at least 2.5.

TALENT BASED SCHOLARSHIPS IN VISUAL ARTS are awarded annually to incoming freshmen pursuing degrees in art. Preference is given to students with exceptional talent and potential; portfolio presentation, artistic background, personal character, and intelligence and scholarship. Applicants must complete a standard departmental scholarship form, and will be notified of dates for portfolio presentation (usually in the late fall of a student's senior high school year, but continuing until all scholarships are awarded). These scholarships are renewable for four years. Recipients must maintain full-time status, follow the recommended sequence of Art courses, and maintain a 2.8 GPA.

ELEANOR B. O'NEIL SCHOLARSHIP is awarded to students majoring in journalism with an emphasis in advertising or public relations.

THE ELVIS PRESLEY SCHOLARSHIP provides a scholarship in communication, film or music to a freshman of academic merit in financial need.

TALENT BASED SCHOLARSHIPS IN MUSIC are awarded annually to students entering the Music Department who demonstrate outstanding musical talent through audition. Applicants must complete an application and schedule an audition. They will be notified of subsequent audition dates. Recipients may renew the scholarship with satisfactory musical and scholastic progress.

TALENT BASED SCHOLARSHIPS IN THEATRE AND DANCE are awarded annually to students entering The University of Memphis Theatre and Dance Program and rest upon theatrical talent and potential; artistic background; personal character; and intelligence and scholarship. Applicants must complete a standard departmental scholarship application and selected finalists will be notified of dates for audition or portfolio presentation. Recipients must maintain fulltime status and a 2.8 GPA.

EMERSON A. ALBURTY AWARDS may be awarded to students who have demonstrated excellence in an area of communication and fine arts at their present high school or college and who will be a full-time major in the College of Communication and Fine Arts. Recipients must have and maintain a 3.0 GPA or its equivalent. Scholarship recipients are to be selected by a committee composed of the dean of the college, the college adviser, and representatives of departments within the college.

MEMPHIS-GERMANTOWN ART LEAGUE AWARD is awarded to a student who demonstrated exceptional artistic abilities in any discipline within the Art Department.

KATHY KRIEGER AWARD is awarded to a student majoring in Broadcasting who has demonstrated academic merit. Involvement with the FM 92 Radio Station is a selection criteria.

THE COLLEGE OF EDUCATION

SARAH P. EATON SCHOLARSHIP provides scholarships for elementary education students from Crittenden and St. Francis counties in Arkansas.

THE KIWANIS CLUB OF EAST MEMPHIS MEMORIAL SCHOLARSHIP is presented to a junior, senior, or graduate student majoring in special education and demonstrating high achievement and need. The recipient must be a Shelby County resident and must have a cumulative GPA of at least 2.50.

THE HAROLD W. PERRY SCHOLARSHIP is awarded to a student majoring in special education and rehabilitation who, in training as a teacher to work with the multihandicapped, demonstrates high scholastic achievement, experience, and a willingness to work with the handicapped.

THE COLLEGE OF EDUCATION ALUMNI CHAPTER SCHOLARSHIP is awarded to an education major. The applicant must demonstrate need and maintain a 3.0 cumulative GPA. The recipient must be a junior or senior.

THE ERNEST C. BALL SCHOLARSHIP is awarded to a student majoring in education who shows academic ability and financial need.

THE FRANCES INA STEWART DAVIES SCHOLARSHIP assists female students pursuing degrees in home economics who maintain a GPA of at least 3.0. Financial need may be considered.

THE ELLEN DAVIES-RODGERS SCHOLARSHIP assists students pursuing degrees in early childhood education with emphasis on nursery school, kindergarten, and grades 1, 2 and 3. The recipient must maintain at least a 3.0 GPA.

THE BARBARA TUCKMAN MEMORIAL SCHOLARSHIP is awarded to students enrolled in economics classes. The recipient must maintain an undergraduate minimum cumulative GPA of 3.00 and a graduate minimum cumulative GPA of at least 3.20 and should be interested in economics education.

THE ELMA ROANE SCHOLARSHIP is awarded to a full-time undergraduate with a minimum GPA of 2.75 and/or a graduate student with a minimum GPA of 3.25. Recipients must declare a major in HMSE and have a desire to work with young people through teaching, coaching, sports leadership, or athletic training.

JACK TALLEY SCHOLARSHIP is awarded to a junior or senior majoring in Consumer Science and Education with a concentration in home furnishing. Must be a Tennessee resident and have a GPA of at least 2.5.

THE HERFF COLLEGE OF ENGINEERING

THE HERFF ENGINEERING SCHOLARSHIPS provided annually through the Herbert Herff Estate are available to beginning and currently enrolled students who have demonstrated aptitude for engineering. Applications for these scholarships are submitted through the Herff College of Engineering. Recipients must have a competitive ACT score.

THE CALVIN STREET MEMORIAL SCHOLARSHIP is awarded to a junior who must have a cumulative GPA of 2.5. The student must be an engineering technology major and exhibit academic merit. Scholarship selection is coordinated by the chair of the Engineering Technology Department and Engineering Scholarship Committee.

THE RAYMOND JOHN AND MYRLIE FENNER COLTHARP MEMORIAL SCHOLARSHIP is awarded to an undergraduate engineering technology student who has at least a 2.0 GPA, and is in financial need. The recipient must be a citizen of the U.S.

THE DEMPSIE B. MORRISON JR. MEMORIAL SCHOLARSHIP is awarded to an undergraduate engineering technology student who has at least a 3.0 GPA and demonstrates financial need. Preference shall be given to students interested in construction specifications. The recipient must be a West Tennessee resident and a member of the Memphis Construction Specifications Institute Student Chapter.

THE RICHARD E. WHITMORE SCHOLARSHIP is awarded to a Tennessee resident who is a sophomore, junior, or senior engineering student demonstrating both financial need and academic achievement, preferably majoring in construction, and an active member of the student chapter of AGC.

TENNESSEE ROAD BUILDERS ASSOCIATION provides scholarships for students interested in following a transportation career and construction related to road building. Selection is made by the Tennessee Road Builders Association. The recipient must have a minimum cumulative GPA of 2.0 and be enrolled in a civil engineering curriculum.

HOYT B. WOOTEN SCHOLARSHIP is awarded to students in electrical engineering. The recipient must be a junior or senior and demonstrate academic ability and financial need.

THE MR. & MRS. W. McNEILL AYRES CONSTRUCTION TECHNOLOGY GRANT is awarded to juniors or seniors majoring in construction technology. A minimum cumulative GPA of 2.50 is required. Preference shall be given to students who must work to meet college expenses.

THE PICKERING MEMORIAL SCHOLARSHIP is awarded to students majoring in civil engineering. A minimum cumulative GPA of 3.0 is required.

THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA SCHOLARSHIPS are awarded to students studying the field of construction within the civil engineering or technology departments. Selections are made based on academic merit.

THE LEON D. CASH SCHOLARSHIP is awarded to juniors and seniors majoring in electrical engineering. A minimum cumulative GPA of 2.50 is required.

THE JOE RUTHERFORD MEMORIAL SCHOLARSHIP (CIVIL ENGINEERING) is awarded to an undergraduate student majoring in civil engineering with a 3.0 GPA. The recipient must be a U.S. citizen and a resident of Shelby County.

THE CLARENCE AND MAE WEISS ENGINEERING SCHOLARSHIP is awarded to a student majoring in engineering. Preference may be given to chemical engineering students should the major be established at The University of Memphis. The scholarship may be renewed by the department.

ENGINEERING SCHOLARS SCHOLARSHIP is awarded to an engineering student selected by the Dean.

PAUL Y. ISBELL MEMORIAL SCHOLARSHIP is awarded to an engineering technology student majoring in manufacturing technology.

MAXWELL F. MCDADE, SR. MEMORIAL SCHOLARSHIP is awarded to students majoring in civil engineering.

DON FARLEY MEMORIAL ENDOWMENT FUND SCHOLARSHIP is awarded to a Civil Engineering student who demonstrates academic merit and financial need.

VAN W. WALTON MEMORIAL SCHOLARSHIP is awarded to students in architectural technology. The recipient must be a junior or senior with a minimum GPA of 3.0.

LOEWENBERG SCHOOL OF NURSING

THE SHARON L. HANSARD MEMORIAL SCHOLARSHIP is awarded to a student enrolled in U of M's School of Nursing. The applicant must be of high moral character and dedicated to service of others, possess academic ability, and have a need for financial assistance to attend U of M.

THE NURSING ALUMNI SCHOLARSHIP is designed to assist deserving students in pursuing a nursing career. The applicant must maintain a 3.0 GPA or better.

THE ALLENE FARRIS MEMORIAL SCHOLARSHIP is awarded to Dyer Country Nursing students based on academic merit.

REGINA MONTESI MEMORIAL SCHOLARSHIP is awarded to a registered nurse attending The University of Memphis to fulfill prerequisites for a BS in Nursing. The student must be a U.S. citizen, have a minimum cumulative 2.5 GPA, and possess academic ability.

WILLIAM A. AND RUTH F. LOEWENBERG SCHOLARSHIP is designed to assist students in pursuing a nursing career. The student must be a U.S. citizen, have a minimum 2.5 GPA and show financial need.

THE ASSISI FOUNDATION OF MEMPHIS, INC. SCHOLARSHIPS are awarded to nursing students who display financial need and academic ability.

THE LETTIE PATE WHITEHEAD FOUNDATION SCHOLARSHIPS are awarded to nursing students who possess academic ability, high moral character, and financial need. Applicants must be U.S. citizens.

UNIVERSITY COLLEGE

THE E. A. HAMILTON SCHOLARSHIP provides financial assistance to students who are firefighters or dependents of firefighters.

THE UNIVERSITY COLLEGE ALUMNI CHAPTER SCHOLARSHIPS are awarded to juniors or seniors enrolled in the University College, based upon financial need. A minimum GPA of 2.50 is required. Up to three scholarships are awarded each year.

SPECIAL SCHOLARSHIPS

AFROTC 2, 3, AND 4 YEAR COLLEGE SCHOLARSHIPS cover full tuition, laboratory fees, reimbursement for textbooks and provide a nontaxable $150 per month subsistence allowance for those enrolled in the Aerospace Studies program. High school applicants must have at least a 2.5 GPA on a 4.0 scale, and a minimum ACT composite score of 24 (1000 SAT). The University of Memphis students may compete for 2 or 3 year full-tuition scholarships based on their cumulative GPA in all college work attempted. GPA requirements vary according to academic major.

AFROTC PROFESSIONAL OFFICER COURSE INCENTIVE SCHOLARSHIP is available to ANY contract cadet enrolled in the Professional Officer Course who earned a minimum of 2.35 GPA for the most recent term completed. This scholarship pays $850 per semester toward tuition and $150 per semester for books. Students also receive a nontaxable $150 per month subsistence allowance. Contact AFROTC for information on how to join the Professional Officer Course and become eligible for this scholarship.

AFROTC EXPRESS SCHOLARSHIP is designed for outstanding minority and non-minority university students pursuing degrees in areas critical to the Air Force. Students must have a minimum college GPA of 2.65 to apply. Oualified minority students may apply regardless of academic major; non-minority students should contact the department for academic major requirements. Scholarships are available for 2 or 3 years, and cover full tuition, books and fees. Students also receive a nontaxable $150 per month subsistence allowance.

ARMY ROTC SCHOLARSHIPS are 4-, 3-, and 2-year scholarships for students who desire to serve in the U.S. Army as officers. Offered by the U.S. Army, these scholarships pay tuition, provide an allowance for books and incidental fees, and pay up to $1,500 a year for subsistence.

ARMY ROTC MINORITY SUPPLEMENTAL SCHOLARSHIPS are available to minority students attending The University of Memphis on an Army ROTC scholarship including Black, Oriental, Hispanic, American Indian, or other ethnic backgrounds which meet Federal minority requirements.

ARMY ROTC SUPPLEMENTAL SCHOLARSHIPS are attractive supplements awarded to high ability ROTC students who are attending The University of Memphis on an Army ROTC scholarship. The scholarships are awarded based on academic merit and leadership potential. The scholarship funds can be used toward any school-related expense.

ARMY ROTC LEADERSHIP SCHOLARSHIP PROGRAM offers scholarships to students who attend The University of Memphis and enroll in the Army ROTC program. The scholarships are awarded annually based on demonstrated leadership and academic merit. The scholarships pay full in-state tuition and are restricted to full-time undergraduate students. The scholarships are renewable for up to 8 semesters for four-year students, 6 semesters for three-year students, and 4 semesters for two-year students.

NAVY ROTC SCHOLARSHIPS pay for tuition, textbooks, fees of an instructional nature and a subsistence allowance. Four-year scholarships are awarded annually based on a competitive selection process in which consideration is given to such factors as high school records, college board scores, extracurricular activities, and leadership qualities. Students who do not receive a four year scholarship through the national scholarship competition but are sincerely interested in the challenge of becoming a Navy or Marine Corps Officer may enroll as a College Program Midshipman. These students do not initially receive financial benefits but they are eligible to compete for scholarships that provide tuition, textbooks, fees of an instructional nature and a subsistence allowance for the remaining three years of their degree program. The Navy also has a two-year scholarship program available to students beginning their junior year in college.

THE JAKE FONDREN SCHOLARSHIP recipient must be a U.S. citizen and an undergraduate of good academic standing who demonstrates financial need and exhibits a definite interest in golf.

THE CURTIS PERSON GOLF SCHOLARSHIP is awarded to undergraduates, either male or female, who exhibit an outstanding talent for golf. Recipients must be U.S. citizens, in good academic standing, and demonstrate financial need.

THE COCKROFT LAUGHLIN BASEBALL SCHOLARSHIP is awarded to a student athlete who is nominated by a chartered Tennessee Fellowship of Christian Athletes Chapter, a Tennessee resident, and a member or prospective member of The University of Memphis's baseball team.

DOUG GRANGER MEMORIAL SCHOLARSHIP is awarded to a member of the baseball team who is a scholar/athlete. Recipient must exemplify the fierce competitiveness and leadership qualities which were attributes of the late Doug Granger.

THE U of M HANDBALL SCHOLARSHIP is given to students participating on the U of M Handball Team. Recipients are selected on the basis of athletic ability and leadership.

BAILEY PRICHARD MEMORIAL RACQUETBALL SCHOLARSHIP assists student athletes on The University of Memphis Racquetball Team. The recipient must maintain a 2.5 minimum GPA.

HELEN HAMILTON PERSON MEMORIAL GOLF SCHOLARSHIP provides assistance for female undergraduate students who are talented golfers and who maintain a minimum GPA of 2.5.

C. HILLMAN ROBBINS MEMORIAL SCHOLARSHIP assists students who are members of The University of Memphis Golf Team.

THE AVRON FOGELMAN BASEBALL SCHOLARSHIP is awarded to members of The University of Memphis baseball team.

THE TIM McCAGE MEMORIAL SOCCER SCHOLARSHIP is awarded to a freshman from the West Tennessee area who is a member of The University of Memphis Soccer Team.

THE CHARLIE MULWEE SCHOLARSHIP is awarded to members of the U of M Handball Team. Recipients must be in good academic standing.

GRANTS

FEDERAL PELL GRANT

The Federal Pell Grant is a non-repayable, federally funded, grant program for undergraduate students. The amount is determined by the financial eligibility of the student (family) and the cost of college attendance. Students must be admitted as regular undergraduates. Applicants must complete the Free Application for Federal Student Aid (FAFSA) to apply for this program.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT

The Federal Supplemental Educational Opportunity Grant program is a federally subsidized program whereby direct gift awards may be made to undergraduate students with exceptional financial need (priority given to Pell Grant recipients). Normally, Supplemental Grants are awarded as part of the student's financial aid package. The amount awarded per academic year will range from $200 to $2,300.00 depending on the student's established need.

THE TENNESSEE STUDENT ASSISTANCE AWARD PROGRAM

Students who are residents of the State of Tennessee may apply for a Tennessee Student Assistance Award. To apply, a student must submit a FAFSA to the central processing agency. The Tennessee Student Assistance Corporation will then forward correspondence to the applicant. Determination as to grant recipients is made by the state agency in Nashville.

LOANS

FEDERAL PERKINS LOAN PROGRAM

The National Defense Education Act of 1958 provided funds to institutions of higher education for the purpose of making low interest, long-term educational loans avail-

able to students who demonstrate academic promise and who have a need for financial assistance. These loans bear no interest until six or nine months (depending on when the borrower's first loan debt was incurred) after students graduate or interrupt their course of study. The interest rate is currently five percent per year on the unpaid balance with a maximum repayment period of ten years. For a listing of repayment deferrals and cancellations, contact the Student Aid Office.

FEDERAL DIRECT SUBSIDIZED STAFFORD STUDENT LOAN

The Subsidized Federal Direct Stafford Student Loan is a low interest loan made through the institution. Depending on financial need, first year undergraduates may borrow up to $2,625 a year; second year undergraduates, up to $3,500 a year, and third, fourth, and fifth year undergraduate students, up to $5,500 a year. Graduate and law students may borrow up to $8,500.00 a year. The total debt an undergraduate student can incur under the program is $23,000. A graduate or law student can incur a total debt of $65,500, including loans made at the undergraduate level. Payment is deferred until six months after the student ceases to carry at least a half-time load. The University of Memphis is a full participant in the Federal Direct Student Loan Program. Under this program all federal student loans (i.e. subsidized, unsubsidized Stafford, and Parent Loan — PLUS) are processed directly through the federal government. No banks, lending institutions or guarantee agencies are involved in processing these loans.

FEDERAL DIRECT UNSUBSIDIZED STAFFORD LOAN

The unsubsidized Federal Direct Stafford Student Loan is a low interest loan made through the institution. This program is not based on need; however, *a student's eligibility for the subsidized Stafford Loan must be determined before an unsubsidized Stafford Loan can be considered.* Interest payments are the responsibility of the borrower, even while the student is in school. Only the principal payments are automatically deferred while the student is in school at least half-time. Repayment of both principal and interest begins six months after the student ceases to be enrolled at least half-time.

At The University of Memphis, all unsubsidized Federal Stafford Loans are processed directly through the federal government. No banks or lending institutions are involved in this process.

ENTRANCE AND EXIT INTERVIEWS

Entrance and exit interviews are required for the Federal Stafford Loan Program and are designed to provide students an opportunity to learn more about the loan programs under which they are borrowing (borrowers rights and responsibilities).

FEDERAL DIRECT PLUS LOAN

The Federal Direct PLUS Loan is a low interest loan program available to parents of dependent undergraduate students. This loan program is not based on financial need. Students would complete a loan request form to apply for this program. A PLUS application would then be mailed to the parent for completion.

All Federal PLUS Loans at The University of Memphis are processed under the Federal Direct Loan program. No banks or lending institutions are involved under this process.

FREEMAN LOAN PROGRAM

The Freeman Loan Program was established for the sole purpose of providing worthy/needy students loans to help pay a part of their educational costs when other financial assistance is not available. Eligibility for this low interest, long-term loan program is based upon satisfactory academic progress and financial need. Applicants for this program must submit the FAFSA and other documents evidencing financial need.

THE TEACHER LOAN SCHOLARSHIP PROGRAM

The Teacher Loan Scholarship Program provides that students who have been admitted to or enrolled in any accredited university in Tennessee and who are committed to teaching in the Tennessee public schools may be eligible for up to $1500 per academic year for up to four years. The program is designed to be awarded as a loan, but as trained teachers fulfill their commitment to teach in Tennessee, the loan will be forgiven or turned into a scholarship on a year-for-year basis. In other words, for each year of creditable full-time teaching in math or science under the Tennessee public school system, the recipients shall receive cancellation credit of 25% of the total amount borrowed plus interest accrued. Applications for information about the program or similar programs may be obtained from the Tennessee Student Assistance Corporation, the U of M College of Education, or the Scholarship Office.

OTHER LOAN FUNDS

The university maintains a number of small loan funds for assisting students with emergency type situations. Some of these loans are listed below:

The General Everett R. Cook Arnold Air Society Loan Fund was established to provide financial assistance in the form of short-term loans for students enrolled in the Professional Officer Course of the Air Force Reserve Officers Training Corps.

The General University Loan Fund provides short-term, low interest loans up to $200 for those students in emergency situations.

The General Ralph H. Wooten Loan Fund was established for the purpose of providing low interest educational loans to students enrolled in the Air Force Reserve Officers Training Corps.

Herbert Herff Registration Loan Program was established to provide short-term loan assistance to students who have no means of paying their registration fees. The loan is a 15% interest-bearing loan and the maximum loan amount is the in-state cost of registration fees assessed for the number of credit hours for which the student is enrolling.

NOTE: this loan will not cover out-of-state tuition. To qualify for the loan, students must meet the following conditions: (1) be classified as a degree-seeking student (Regular Undergraduate, Regular Graduate, or Regular Law Student); (2) maintain a cumulative GPA of 2.0 for undergraduate students, 3.0 for graduate students, and 2.0 for law students; (3) be enrolled in not less than six credit hours for the semester; (4) have no debts to the university.

The University Book Loan Program was established to assist students who have been approved for Financial Aid payment but who are experiencing delays in receiving their awards. The loan is a 15% interest-bearing loan, with a minimum loan amount of $100 and a maximum loan amount of $250. Any amount approved will be credited to the student's Tiger Fund$ Account and must be used for textbooks and other educationally related materials. This loan (interest plus principal) must be repaid by November 1 of the Fall semester and by April 1 of the Spring semester.

STUDENT EMPLOYMENT

The University of Memphis offers two types of on-campus student employment: Federal Work-Study (FWS) and Regular Student Employment (RSE). Students cannot be employed under both programs at the same time.

FEDERAL WORK-STUDY

Federal Work Study (FWS) is a need based financial aid program. It is federally funded, university administered, and designed to help students defray the cost of post-secondary education. The amount of the award is based on need and the availability of funds. The pay will be at least the current federal minimum wage, but it may also be related to the type of work to be performed and its difficulty. Students must be enrolled for and maintain at least six (6) semester hours (Fall/Spring) and six (6) semester hours (Summer) to qualify for Federal Work Study. To apply, students must file the FAFSA and other required documents each year.

REGULAR STUDENT EMPLOYMENT

The Regular Student Employment (RSE) program offers on-campus, part-time jobs to students who do not qualify for Federal Work-Study. This program is

monitored by the university. Application for RSE may be filed at any time during the year; however, employment is contingent upon the availability of jobs. Regular Student Employees must be enrolled at The University of Memphis for at least six semester hours. Students seeking on-campus employment should contact the University Student Employment Office.

INTERNATIONAL STUDENTS

International Students on permanent visas are eligible to apply for Federal Work Study. Pursuant to regulations of the Immigration and Naturalization Service, there is a restriction on the number of hours students on certain visas may work. Those students who have questions regarding employment should contact the International Student Advisor.

STUDENT AID REFUND REPAYMENT POLICY

REFUND:

1. When a student receiving Title IV funds withdraws from the university, an appropriate refund amount is calculated based on the U.S. Department of Education guidelines. In determining this refund amount, the university may retain an administrative fee if applicable under the guidelines. Once the total refund amount has been calculated the Student Aid Office will determine, according to federal formula, the portion of the refund to be returned to the federal aid account(s).
2. Effective with the passage of the Higher Education Amendments of 1992 (the 1992-93 Academic Year), federal regulations specify the order in which Title IV programs will receive any refund amount. The order is: Federal Family Loan Programs (Unsubsidized Stafford, Subsidized Stafford, PLUS), William Ford Federal Direct Loan Programs, (Unsubsidized, Subsidized, PLUS), Federal Perkins Loan Program, Federal Pell Grant Program, Federal SEOG Program, any other Federal Title IV Program, institutional aid programs, and the student.
3. Refunds applicable to non-Title IV funds will be distributed to the respective aid accounts in the same proportion as the aid awarded.
4. A 100% refund will be given in the event of death.

REPAYMENT:

1. When a student receives financial aid and one of the following situations occur: (a) the student is issued a contingency fee card that is not honored by the fund agency involved; (b) the student receives an overpayment due to non-eligibility or administrative error; (c) the student withdraws before the start of classes or fails to pay tuition/maintenance fees, the student must repay the total amount of aid received or overpaid.
2. If a student receives funds in excess of university charges for cost-of-living expenses from Pell Grant, Perkins Loan, Supplemental Educational Opportunity Grant (SEOG), and/or State Student Incentive Grant programs (Federal Title IV programs), and subsequently withdraws or drops out of school: (a) the student's cost-of-living expense, as determined by the Student Aid Office, incurred up to the date of withdrawal will be compared to the amount the student received for that term for such expenses; (b) if the amount received exceeds the expense incurred, the excess amount will be considered an overpayment and must be repaid by the student.
3. The repayment amount will be placed in the respective aid account(s) in the order mandated by federal regulations.

SATISFACTORY ACADEMIC PROGRESS POLICY FOR FINANCIAL AID RECIPIENTS UNDER FEDERAL AND INSTITUTIONAL PROGRAMS

All students who receive financial aid must be in a degree seeking program and comply with all institutional, state, regulatory and federal policies and standards applying to financial aid programs. Students receiving athletic or other university administered awards must also meet the satisfactory academic progress standards established by the respective agency or awarding entity. In order to assure that student aid recipients make progress toward a degree, both in terms of number of hours attempted and/or completed and the cumulative Grade Point Average (GPA). The University of Memphis will utilize the following satisfactory academic progress policy.

NOTE: This policy applies only to students financial aid eligibility, not their university academic standing.

I. Maximum Time Frame for Completion of Degree (Quantitative Measure)

1. Undergraduate students' maximum time frame for completion of their first degree is limited to 150 percent of the published length of their educational program. For most students, the maximum limit would be 198 attempted hours, which includes all hours withdrawals, dropped or failed classes.

   Undergraduate students who change degree programs will be measured against this same maximum time frame.

   NOTE: The maximum time frame may vary for particular degree programs. Progress will therefore be measured against the specific degree program.
2. Transfer students will be bound by the same maximum time frame for completion of a first degree. Total attempted hours will be considered toward the maximum time limit.
3. Undergraduate students' maximum time frame for a second Bachelor's Degree will coincide with the completion requirements of the second degree program, not to exceed their maximum loan indebtedness.
4. Graduate students' maximum time frame will vary depending on the particular degree program as specified in the Graduate Bulletin and/or their maximum loan indebtedness.
5. Law students' maximum time frame will coincide with the degree completion requirements and outline or required classes as listed in the Cecil C. Humphreys School of Law Bulletin and/or their maximum loan indebtedness.
6. **Definition of Enrollment.** The credit hours specified below are listed for each degree level. The minimum credit hours attempted and/or earned must coincide with the particular degree level.

	Full-Time	Three-Quarter Time	Half-Time
Undergraduate	12+ sem. hrs.	9-11 sem. hrs.	6-8 sem. hrs.
Graduate	9+ sem. hrs.		5 sem. hrs.
Law	12+ sem. hrs.		6 sem. hrs.

   NOTE: In the Summer, law students are considered half-time with only 3 semester hours and full-time with 6 semester hours.
7. Undergraduate students who are required to take remedial/development classes are limited to 30 semester hours in this area, which will not be included in the Maximum Time Frame (see I.1.)

   The determination of each student's quantitative progress under the maximum time for degree completion will be made after each semester.

II. Cumulative Grade Point Average (Qualitative Measure)

In addition to the above, students must meet academic retention standards of The University of Memphis and must meet the following cumulative GPA requirements.

1. FEDERAL GRANT AND WORK STUDY PROGRAMS

a. Undergraduate students must have a minimum 1.65 cumulative GPA at the end of their freshman year based on their enrollment status and total hours completed.

b. Students who receive federal aid will be suspended from further financial aid if they do not have a minimum 2.0 cumulative GPA at the end of their sophomore year based on their enrollment status and total hours completed.

c. Undergraduate students who transfer credit hours and grades from another institution will be evaluated on the number of hours transferred in addition to their grade point average (GPA) according to the guidelines specified in a. and b. above.

   NOTE: Hours transferred will be considered as total hours earned or completed. The transfer GPA will also be considered in evaluating a student's current academic status.

2. LOAN PROGRAMS (FREEMAN/FEDERAL PERKINS/SUBSIDIZED AND UNSUBSIDIZED STAFFORD/PLUS)

a. Undergraduate and law students must maintain a 2.0 cumulative GPA to receive student loans.

b. Students seeking a second Bachelor's Degree must maintain a 2.0 cumulative GPA to receive student loans.

c. Graduate students must maintain a 3.0 cumulative GPA to receive student loans.

d. Transfer students must meet the terms as specified in 2.a., b., and c. and have the required minimum GPA upon entering The University of Memphis to receive student loans. If the transfer GPA is not available upon entering The University of Memphis, the student's progress will be evaluated at the end of spring semester according to the terms specified in 2.a., b., and c.

e. Students who fail all of their classes for the semester will not receive their second loan disbursement, if any, for the following semester.

The determination of each student's qualitative progress in terms of the 2.0 GPA requirement by the end of the sophomore year (i.e. 55 earned hours) will be made at the end of each semester.

Qualitative progress in other areas will be evaluated at the end of spring although all loans are subject for review at the end of each semester. Students who enroll in summer school in order to resolve the minimum GPA requirements must notify the Student Aid Office in writing of any changes for possible reinstatement of aid.

III. Failure to Meet the Satisfactory Academic Progress Requirements

1. FINANCIAL AID PROBATION

a. Undergraduate students with at least 24 completed hours will be placed on financial aid probation for the next semester of enrollment if they do not have a minimum 1.65 cumulative GPA at the end of the Spring semester for grant consideration only *OR* a 2.0 cumulative GPA for loan consideration.

b. Undergraduate students who are pursuing a second Bachelor's Degree will be placed on probation the first time their cumulative GPA drops below 2.0.

c. Graduate and law students will be placed on probation the first time their cumulative GPA falls below the minimum requirements (i.e. 3.0 for graduate and 2.0 for law).

d. Students who withdraw from classes for the *first* time will be placed on financial aid probation. A second withdrawal will result in financial aid suspension.

   NOTE: The minimum GPA requirements must also be met or the student will be placed on suspension for their next period of enrollment.

e. Financial aid payment may be continued during probation for the grant programs *only*.

2. FINANCIAL AID SUSPENSION

a. Undergraduate students with at least 54 completed hours will be placed on financial aid suspension for the next semester of enrollment if they do not have a minimum 2.0 cumulative GPA at the end of their sophomore year.

b. Undergraduate students pursuing a second Bachelor's Degree will be placed on financial aid suspension the second time their cumulative GPA falls below 2.0.

c. Graduate and law students will be placed on financial aid suspension the second time their cumulative GPA falls below the minimum requirements (i.e. 3.0 for graduate and 2.0 for law).

d. Students who withdraw from classes the second time will be placed on financial aid suspension.

e. Undergraduate students pursuing a first Bachelor's Degree who have exceeded the 150% time frame for completion of their educational program will be placed on financial aid suspension.

f. Students will not be eligible for financial aid and will not receive financial aid payments during a period of suspension.

3. **REMOVAL FROM SUSPENSION**

a. Students will be removed from suspension when they meet the specified cumulative GPA requirements as outlined in Section II. At that time, they will again be able to receive financial aid. Students should also notify the Student Aid Office in writing when there is a change in their cumulative GPA which would bring them up to the minimum required level for receipt of financial aid.

b. Students receiving financial aid who have been placed on financial aid suspension due to withdrawal from all classes for the second time will need to follow the appeal process as outlined in Section III. 4.

4. **APPEAL OF FINANCIAL AID PROBATION/ SUSPENSION**

Students placed on financial aid probation or suspension may appeal that decision to the Director of Student Aid within 30 days of the date of notification. The appeal must be prepared in writing and accompanied by appropriate supporting documents. Reasons that may be acceptable for an appeal are:

a. Serious illness or accident to the student. A medical statement from a physician will be required.

b. Death, serious illness, or injury in the immediate family (parent, child, spouse). A physician's statement or death certificate will be required.

c. Administrative error by The University of Memphis. The appeal will receive an Approval or Denial from the Director or a Student Aid designee. If not satisfied with the decision of the Director or designee, students may appeal to the Assistant Vice Provost for Enrollment Services. Subsequent appeals may be made to the Vice Provost for Student Affairs, and if deemed necessary by the student, to the President of The University of Memphis.

5. **FINANCIAL AID FRESH START**

Students who are enrolled in this program, (they have been away from all academic institutions for at least seven years), will have their academic progress monitored on a term by term basis, as outlined in the policies above. Students would also be expected to maintain a GPA of at least a 2.5 by the end of each semester.

3. REGISTRATION AND STUDENT RECORDS

REGISTRATION

All continuing students are expected to register during October and/or November for the following Spring semester and in April for the following Summer and Fall. Fees are normally due approximately one month prior to the beginning of the term. Students are responsible for becoming familiar with the deadlines, rules and regulations related to registration which are published each term in the *Schedule of Classes.*

STUDENT RECORDS

The Office of the Registrar-Student Records provides grade reporting and transcript (academic record) services. Grades are mailed to the student's permanent address one week following the last final exam for the semester.

Transcripts are issued at the request of the student in person, by letter, or by FAX. Students should include social security number, name as of the last date of attendance, and signature on the requests. There is no fee.

The University is required by state law to withhold grade reports and transcripts from students who have outstanding financial obligations to the University.

STUDENT INFORMATION SERVICES

Student Information Services provides services to students related to their current term enrollment and their personal student biographic/demographic data. These include: schedule adjustments (drop/add/ withdrawal), name changes, address changes, etc. This office (Administration Building, Room 119) is open some evenings and weekends. Please see the *Schedule of Classes* or phone the office for specific times. In the evenings representatives from Financial Aid and Admissions are also available to provide assistance.

VETERANS SERVICES

Location: Veterans Services reports to the Office of the Registrar, Administration Building, Room 119.

Mission: The Office of Veterans Services provides assistance for eligible National Guard/Reserves, veterans and/ or dependents who enroll at The University of Memphis and who make application for: (1) Programs of Education or Training, (2) VA Tutorial Services, or (3) VA Educational Loans. Other assistance includes: liaison with Veterans Administration Regional Office, counseling, and counseling referral for personal, family, career, financial, and educational problems.

Applications for VA Benefits: Those who will be using VA educational assistance while enrolled at The University of Memphis should contact the Office of Veterans Services. They should also be prepared to furnish the following items as applicable:

1. The number 4 original or copy of the DD214 or other armed forces separation papers.
2. Copy of Delayed Enlistment Contract.
3. Copies of marriage licenses and children's birth certificates.
4. Copy of final divorce decree if either veteran or spouse has been previously married.
5. VA file number if benefits have been used previously.

Advance Pay: Advance payment is available for eligible veterans and dependents who plan to enroll on at least a halftime basis. Applications will be accepted in the Veterans Services Office as early as 120 days before the term begins but no later than 45 days before the beginning entry. Generally, the advance pay deadline for the fall semester is around July 15, while spring semester deadline is around November 15. Advance pay checks include an allowance for the month or fraction thereof in which the course begins and the allowance for the following month. Advance pay checks are mailed to the school for delivery to the student at registration. Initial applicants who do not apply for advance pay may expect their check to be mailed to their home within six to eight weeks after registration.

Enrollment Status: For VA benefits during the regular terms (Fall and Spring) 12 semester hours constitute a full-time load for undergraduate students; 9 hours is full-time for graduate students. However, training time for summer at the undergraduate and graduate rate is based on the number of semester hours attempted per term. The Veterans Administration places restrictions on those who receive veterans educational benefits. Some of these restrictions are: (1) regular class attendance, (2) satisfactory academic progress, and (3) adherence to a specific degree plan.

Degree Plan: Only courses that are required for the degree and major may be certified for VA pay. VA will not pay for repeat courses if the grade already earned is accepted by U of M and will fulfill graduation requirements toward the declared degree and major (even if the course was taken at another institution with or without use of the G.I. Bill). VA will not pay for elective courses in excess of those needed to meet graduation requirements.

Although advisors are provided for veterans, this assistance does not relieve students of the responsibility for fulfilling all VA and University requirements.

Certification: Enrollment certifications are mailed to the appropriate VA Regional Office upon receipt of the Veterans Data Sheet. Students are required to submit this form to the Veteran Services Office at U of M each semester. Students will be certified on a term-by-term basis. Pre-certification will be done only when a request for advance pay is made.

4. ADULT STUDENT DEVELOPMENTAL SERVICES

Adult Services

Adult Services serves adult students who are beginning or returning to school after some time in the work place or home, and traditional and non-traditional age commuter students.

Located in the University Center, Adult Services maintains the Adult Information Center, a resource area where services and special programming for this student population is posted regularly. Information on the Adult Scholarship program is also available.

The Adult Student Association, a student organization geared toward the social needs of the returning student is maintained through Adult Services. This organization provides an informal way for

students to receive support during their educational experience and to express concern about any particular issues that may arise. "Lifelong Learning with Friends" is the motto of the Adult Student Association, which serves as a network for the returning student.

MINI College

MINI College is a special entry and re-entry program for adults who are entering college for the first time, and for those who are returning after being out of school for any number of years. MINIis an acronym for "Moving into a New Identity." The office is designed to familiarize the non-traditional student with the academic programs and services available at the university and to provide individual assistance in the admissions and registration procedure as well as academic advising. Admission requirements are the same as those for the undergraduate application categories described earlier in this section.

Each semester, MINI College offers a schedule of basic, entry level credit courses. Most fall and spring classes meet just once a week and are scheduled at convenient times, both day and evening, for the part-time student.

A student electing to take MINI College courses receives regular credit and attends classes with other returning adult students. For further information, contact the MINI College Office.

Child Care Center

Child care services are available for The University of Memphis students. Space is available on a first come/first serve basis. The center accepts children between the ages of 30 months and 12 years. The cost is $1.50 per hour/per child with a $20 registration fee that is refundable if the student uses the services according to the rules and regulations outlined in the Child Care Center handbook.

During the fall and spring semesters, the center's hours are Monday through Thursday, 7:30 a.m. to 9:00 p.m., Friday, 7:30 a.m. to 4:30 p.m. and Saturday 8:30 a.m. to 12:30 p.m. The summer semester operating hours are Monday through Thursday from 6:30 a.m. to 9:00 p.m. and Friday from 6:30 a.m. to 4:30 p.m. *Hours of operation may vary due to enrollment.* For additional information, come to the Child Care Center located at 3875 Tiger Paw South (Northeast of the Central Avenue Parking Lot—adjacent to the university townhome community).

STUDENT DEVELOPMENT

The quality of The University of Memphis is reflected not only in the content of its academic programs but also in the array of services and activities provided for its students. At U of M, satisfying the individual needs of students has become an ever-increasing commitment, regardless of whether those needs are personal, academic, psychological or social.

The university strives to make student life fulfilling in an environment conducive to academic growth. The range of support services provided includes counseling, skills training, tutoring, health care, and job placement, to name only a few.

THE CENTER FOR STUDENT DEVELOPMENT

The Center for Student Development is a comprehensive counseling and assistance facility providing academic, psychological, and career resources for students to draw upon as they confront the developmental tasks concomitant with their educational experience. The Center for Student Development encompasses a variety of free counseling and helping activities through its various components. As part of its educational mission the center offers an APA approved Pre-Doctoral Internship Training Program for graduate students in clinical and counseling psychology.

Academic Counseling

All freshman, transfer, and readmitted students who have not decided upon an academic major are assigned to an academic counselor. The purpose is to provide academic counseling that will prepare students for enrollment in one of the degree-granting units once they have chosen a major. The counselors are available to discuss the many academic programs offered and to help the students explore these possibilities as they relate to their personal and educational goals.

Psychological Counseling

The psychological counseling component provides students with the opportunity to discuss and explore any concerns and feelings that are of importance to them. Problems in relationships, feelings of loneliness or inadequacy, family or marriage difficulties, depression, the inability to concentrate or study, or simply "feeling the need to talk things out" are all examples of concerns that are dealt with through psychological counseling. The staff is professionally trained and experienced in working with a wide variety of student concerns through individual and group counseling, testing, programs and workshops, and referral to additional service centers on and off campus. The counselors subscribe to the confidentiality policy in the ethics and guidelines established by the American Psychological Association.

Career Counseling

Career Counseling affords students an opportunity to explore self, career options, obtain information relating academic majors to career choices, evaluate employment outlook information, network with professionals in the community, and develop realistic career goals. Through counseling, computer assistance and testing, each person is given the opportunity to make a well-considered career choice.

The Testing Center

The Testing Center provides testing services for university and professional school admissions purposes as well as for licensure and certification in a variety of professional areas. The center also offers a variety of personality and psychological tests.

Educational Support Program

The Educational Support Program (ESP) provides free tutorials through six learning centers: Academic Enhancement (General Education courses, study, reading, test-taking strategies), English (writing across the curriculum), Mathematics (math for all courses), Business (all courses in those majors), Foreign Language (Spanish and other languages), Engineering/Engineering Technology (all majors). Students must be enrolled in the course at U of M for which the tutorial is requested. Tutors are available for both individual and group study sessions. Computer programs for graduate exams are for student use. Workshops are regularly presented and can be scheduled for classes and organizations.

ATHLETIC ACADEMIC SERVICES

The Center for Athletic Academic Services is located in the Elma Roane Field House and provides counseling, tutoring, scheduling assistance, career planning and special services for all The University of Memphis student athletes. The center also handles NCAA interpretations and the academic eligibility requirements of student athletes.

STUDENT DISABILITY SERVICES

Student Disability Services provides information and support services that enable students with disabilities to take full advantage of the educational opportunities at The University of Memphis. Specific services are determined individually and are based on disability related needs. Services include pre-enrollment

planning; specialized orientation; early registration; adapted campus housing; attendant referral; academic aids such as readers, notetakers, tutors and interpreters; test accommodations; assistance in securing special materials such as recorded texts, large print and braille; adaptive computer technology and other special aids; assistance arranging classroom accommodations; campus shuttle service; supportive guidance and counseling; and liaison with state rehabilitation agencies. Some services require advance notice to arrange. Applicants should provide sufficient notification to Student Disability Services of their needs and enrollment date. Given adequate time, experienced staff will provide assistance in evaluating individual needs and in developing a plan for appropriate disability services.

All persons who have a permanent disability are encouraged to register with Student Disability Services and provide this office with medical documentation of their disability. This registration entitles qualified students with disabilities to the legal rights provided under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. For more information, please contact the Director of Student Disability Services.

CAREER AND EMPLOYMENT SERVICES

Career and Employment Services (C&ES) are provided to assist graduating students and alumni in locating career employment in business, education, government, industry, and service organizations. Services provided include: on-campus interviews with employer representatives; job listings of employment opportunities, including job listings on the World Wide Web through "JobTrak"; an employer resource library; job placement advising; computerized job matching/referrals utilizing "Resume Expert" software; and interviewing skills and resume writing workshops.

C&ES jointly sponsors Career Fairs with The U of M National Alumni Association. The Career Fairs occur in the Spring and include a business/government career fair plus an education/school system career fair.

Registration for services is required and it is recommended that seniors and graduate students register three semesters prior to graduation. C&ES is open Monday and Tuesday 8:00 a.m.-6:00 p.m., and Wednesday through Friday 8:00 a.m.-4:30 p.m. Departmental facilities are located in Scates Hall, Room 315.

Part-time and temporary employment opportunities for current students are coordinated by a branch office of Tennessee Employment Security. They are located in the Health Center, Room 112.

STUDENT HEALTH SERVICES

Location and Hours: Student Health Services is located in the Health Center building at the corner of DeSoto and University. It is open Monday through Friday, 8:00 a.m.-4:30 p.m. (open later some evenings). A physician is available during most normal working hours. Treatment is provided for short-term, acute illness and injuries on an outpatient basis.

Eligibility for Care: All students with a valid ID card may be seen for medical care. Faculty and staff may be seen for a small charge. Individuals are seen on a first come, first served basis. For health emergencies after hours, please call Police Services (678-HELP).

Services: The center is staffed by a physician, nurse practitioners, registered nurses, medical and x-ray technologists, and administrative support personnel. A family planning clinic is available by appointment. Crutches and wheelchairs are loaned out. Applications for reduced tuition fee waivers and for handicapped parking decals are handled in this department. Many prescriptions written by the physician or nurse practitioner may be purchased at the dispensary (students only). Over-the-counter medicines are available for anyone to purchase. Referrals for specialists for patients with TennCare, Cigna HMO, PruCare HMO, or any HMO type of insurance, must be done through the primary care physician. Personnel at Student Health Services do not file insurance forms.

The Health Educator, whose primary responsibility is to coordinate alcohol and substance abuse education efforts on campus, is available to present a variety of health related programs upon request.

Charges: Students are not charged for services at the Center. However, they are expected to pay in advance for lab tests sent to off-campus labs and for prescription medicines. TB skin tests, flu shots, measles shots, Hepatitis B vaccines, routine tetanus boosters and certain orthopedic devices are available at the Center for nominal charges. When a student has an illness or injury beyond the scope of what can be treated at the Center, the student is referred to a medical facility off-campus. The patient is responsible for all charges incurred for those services. Charges for appointments at the Memphis and Shelby County Family Planning Clinic at the Health Center are on a sliding fee scale.

Health Insurance: The Tennessee Board of Regents has authorized a private insurance company to provide health insurance for students. Students may pick up a brochure about the insurance from Student Health Services. The student pays the insurance company directly for the policy.

STUDENT LIFE

Student Life is one of the many components of the university community that offers students a wide variety of learning experiences outside the formal classroom setting. Included in the area of Student Life are activities including: Student Government, Greek Affairs, Student Organizations, Religious Affairs, Black Student Association, and Student Activities Council. Information may be obtained from the Office of the Dean for Student Life.

Campus Information System (Gopher)

The computerized Campus Information System (CIS), operated by the Computer Services Department in the Administration Building, has replaced the Student Information System (SIS) formerly located in the University Center.

CIS is accessed via PCs and computer terminals linked to the University VAX mainframe computer. Access is provided to databases and files containing research and statistical information as well as community news and items of interest to University of Memphis users.

Departments may submit information and items of interest for posting on the CIS. Additional information is available at Computer User Services in the Administration Building, Room 134.

Cheerleaders

The University of Memphis cheerleaders are one of the "Premier College Squads in the Nation." The cheerleading squads consist of a Varsity team (up to 10 couples) and an all-women "Blue Squad" that has 14 to 16 members. The mascot, "Pouncer," and both squads cheer at all University of Memphis home football and basketball games. The Blue Squad also cheers for the Lady Tigers' home games in the Field House on The University of Memphis campus. The cheerleaders and "Pouncer" are involved in an array of community and university activities. For additional information, contact the Cheerleading Office, Field House, Room 375.

Emerging Leaders

This student development program consists of structured activities that are designed to refine participants' leadership abilities. Although all students are eligible to apply for participation in the program, participation is mandatory for students who have Emerging Leadership Scholarships. Students are required to obtain credit for three leadership classes in addition to holding executive offices in diverse student organizations, mentoring underclassmen, and taking an active role in volunteerism. Upon completion of the program, students receive official docu-

mentation on a leadership transcript confirming extensive involvement and instruction in the program.

General Fraternities and Sororities

Fourteen national fraternities and eleven national sororities are active on The University of Memphis campus. The university strives to maintain a strong Greek system through coordination of Greek activities provided by the Office of Greek Affairs in areas of social service, scholarship, spiritual life, social development, and sense of leadership.

Fraternities: Alpha Tau Omega, Alpha Phi Alpha, Delta Chi, Kappa Alpha Psi, Kappa Sigma, Lambda Chi Alpha, Omega Psi Phi, Phi Beta Sigma, Phi Gamma Delta, Phi Sigma Kappa, Pi Kappa Alpha, Pi Kappa Phi, Sigma Alpha Epsilon, and Sigma Chi.

Sororities: Alpha Chi Omega, Alpha Delta Pi, Alpha Gamma Delta, Alpha Kappa Alpha, Delta Gamma, Delta Sigma Theta, Phi Mu, Pi Beta Phi, Sigma Gamma Rho, Sigma Kappa, and Zeta Phi Beta.

Campus Recreation and Intramural Services (CRIS)

As a unit within the Department of Student Life, the campus recreation and intramural program (CRIS) is designed to fulfill a vital educational function and provide students, faculty and other members of the university community the opportunity to participate in a variety of activities for personal enjoyment and physical exercise as well as intramural competition.

The Physical Education Complex provides excellent facilities for instructional, intramural and sports programs. The sports activities, including individual and group, range over approximately 30 different sports. The department supervises recreational use of the Physical Education Complex; provides for the reservation of tennis courts, racquetball-handball courts and other play areas; organizes intramural tournaments; sponsors leisure course series, clinics and events; and coordinates a sports club/activity program. The student oriented Intramural and Recreation staff gives personal attention to the needs of individual students, faculty and staff.

Judicial Affairs

The Office of Judicial Affairs is responsible for the administration and coordination of student disciplinary actions involving both social and academic misconduct. It also coordinates the publication of the Student Handbook and is a legal resource for the interpretation of policy and implementation of new policies that affect students. The Office of Judicial Affairs is located in the University Center, Room 105.

Minority Affairs

The Office of Minority Affairs advises African American students. The office deals with the social, academic, personal, and financial concerns of minority students.

Besides advising individual students, the office advises 15 different organizations for African American students. The Black Student Association is a multipurpose organization that focuses on enlightening individuals about the black culture. It provides a support system that addresses the students' academic needs as well as an U of M black alumni network that aids the students' employment needs. The BSA produces a monthly paper, *The BSA Torch,* which keeps the students informed of issues relating to African Americans at The U of M and in the Memphis community. The BSA and fourteen (14) other African American student organizations sponsor approximately 160 cultural, social, and academic programs during the academic year.

Office of International Students

The Office of International Students advises international students regarding immigration, health, housing, social, personal, and financial concerns. Besides advising individual students, the office advises the International Students Council. The council represents six national student associations: the African Student Association, the Chinese Student Association, the Indian Student Association, the Korean Student Association, the Malaysian Student Association, and the Muslim Student Association. The office also organizes a four-day orientation for new students each semester as well as social and cultural events that encourage international students' involvement in the campus community and help ease their transition into the American way of life. International Night, the biggest event of the year, provides an opportunity for the international students to share their traditional food and entertainment with the campus and the Memphis community.

Pom Pon Squad

The University of Memphis PomPon Squad is the top dance team in the country, having won the National Championships nine times. There are two squads, the Varsity and Junior Varsity. Both squads perform at all home football games. The Varsity attends all men's basketball games, performing half-time shows at selected games. The Junior Varsity performs at the Lady Tigers' home games. For additional information, contact the PomPon Office, Field House, Room 377.

Religious Affairs

Several religious organizations maintain meeting facilities close to campus or meet in university facilities. These organizations provide activities adapted to the needs of university students and are designed to aid in the continuing religious growth and development of members of the university community. The organized religious groups include: Baptist Student Union, Barth House (Episcopal Student Center), Bellevue Christian Fellowship, Campus Crusade for Christ, Catholic Student Center, Chi Alpha Christian Fellowship, Christian Student Center (Church of Christ), Fellowship of Christian Athletes, Gospel Choir, Inter-faith Council, Islamic-Quranic Association, Jewish Student Union, Latter Day Saints Student Association (Mormon), Muslim Student Association, Navigators, Power of Pentecost, 20th Century Christians, United Students for Christ, Wesley Foundation (United Methodist), and Westminister House (Presbyterian).

Residence Life

Residence Life, located in Richardson Towers, Room 011, administers The University of Memphis residence halls and the programming of student activities within these buildings. Residential communities provide an environment to enhance individual growth and development through the implementation of educational, cultural, social, and recreational programs that encourage interaction among residents, faculty, and staff. During 1995, over 2,000 students lived on campus. Names and rental charges for each residence hall can be found in the Expenses section of this bulletin.

Student Activities Council

The Student Activities Council is the principal programming body for the university community. It is composed primarily of student volunteers for the purpose of providing social, cultural, recreational and educational activities, and events that appeal to a wide variety of tastes. Concerts, fashion shows, coffee house entertainment, movies, speakers, and the Madrigal Dinner are just a few of the many activities planned and facilitated by the Student Activities Council (SAC).

Student Government

The Student Government Association represents advocates for students while working with other integral university components. Students may serve in the executive, legislative, or judicial branch or on committees.

Student Organizations

Approximately 187 student groups representing a broad range of interests are registered with the university. For information, inquire at the University Center Director's Office, Room 208.

Student Volunteerism Office

The Student Volunteerism Office acts as an information center for current and future programs that have community service components. It acts as a liaison between individual student volunteers and community agencies of similar interest and concern. The office also publicizes and encourages service activities within and among existing student organizations at The University of Memphis.

Students and organizations interested in community service opportunities should contact the Student Volunteerism Office, University Center, Room 205.

University Center

The University Center is the focal point for activities and events in the university community. Along with its many programs and activities, the center provides conveniences such as food service, automatic banking, bookstore, ticket office, gameroom, rental lockers, televisions, vending, copy machine, public phones, central scheduling and information. The center is an organization with programs designed to encourage students and other members of the community to meet and share interests and talents in an action-learning setting.

OTHER ACTIVITIES AND SERVICES

Intensive English for Internationals (ESL)

The intensive English language program has been developed to meet the needs of internationals in Memphis and the surrounding area, and from abroad. English language instruction for non-native speakers of English is offered at five levels of instruction. For students coming from abroad, the program follows the university calendar for the fall and spring semesters. An eight-week session is offered during the summer. Internationals residing locally can enroll for shorter periods of time. Classes designed to meet special needs can also be arranged outside of those regularly scheduled.

International Programs and Study Abroad

The Office of International Programs administers semester and year-long exchange programs and facilitates study abroad programs for shorter periods of time. Exchanges are currently available at more than 100 colleges and universities in some 35 countries through the International Student Exchange Program. Some of the ISEP programs are taught totally in English and others totally in the native language, but many provide the opportunity to increase language skills while taking other courses in English.

Direct or one-on-one exchanges are also administered by International Programs. The University of Memphis currently has agreements for such exchanges with universities in Belgium, China, Czech Republic, France, Japan, Germany, and the United Kingdom. Negotiations to add to the number of exchange partners are underway, both direct and through ISEP.

Short term study programs in the summer are offered by faculty members of The University of Memphis and through consortia and affiliated programs. Spanish study in Costa Rica and the British Studies Program in London are among the more popular offerings. The Office of International Programs also maintains a library of information on other American and international programs for semester or summer study around the world. International Student Identification Cards which provide insurance and discounts for students traveling abroad may be purchased at the Office of International Programs.

Competitive Study Abroad Scholarships are available to academically able students. These awards provide funds for travel to the place of study and a small stipend. Generally, financial aid which is available for on-campus study, is available for study abroad as well.

The Office of International Programs welcomes the opportunity to advise students on the possibilities of study abroad.

Pre-Law

Law schools do not prescribe a definite pre-law curriculum for prospective applicants. Therefore, there is no single major required for pre-law students. Instead, law schools seek to attract applicants posses-sing a broad educational background. The University of Memphis offers a minor in Legal Thought and Liberal Arts, designed for students who intend to enter the legal profession. Coursework in the minor introduces students to the major intellectual traditions of the West and assists in the development of the skills necessary for future success in law school.

The Pre-Law Society provides students the opportunity to meet practicing attorneys, judges, law school faculty and admissions officers as well as other students with similar interests. The society, in cooperation with the Cecil C. Humphreys School of Law, sponsors an annual orientation afternoon at the law school during which members have the opportunity to attend classes and meet law faculty and students.

Students interested in law school, the minor in Legal Thought and Liberal Arts or the Pre-Law Society should contact the Pre-Law advisor in Mitchell Hall, Room 207.

The University Store

The University Store is managed by Barnes and Noble Bookstores, Inc. for the convenience of students, faculty and staff. In addition to textbooks and required school supplies, the store handles a large selection of general books, complete line of insignia clothing and gift merchandise, microcomputers, art supplies, and a variety of items for the convenience of the resident students.

Post Office

The University Post Office has post office boxes available for rent by students and faculty. Students living in university housing have post office boxes located in these facilities. Student mail should be addressed as follows:

Student Name
The University of Memphis
Campus Box 52XXXX
Memphis, TN 38152

Automobiles on Campus

Each student who expects to operate and park any motor vehicle on the campus of The University of Memphis must be registered with the Parking Office by receiving an official permit (hangtag). Permits (hangtags) are permanent and must be displayed when parking a vehicle on campus. Each new student will be issued a permit (hangtag) by the Parking Office when the student pays Registration (Enrollment) Fees. The student will receive a validation sticker for placement on the original parking permit every subsequent semester that Registration (Enrollment) Fees are paid.

A valid parking hangtag does not guarantee a parking space on university property. It is the driver's responsibility to locate an authorized parking space and abide by the parking rules and regulations of The University of Memphis. Citations will be issued and vehicles may be towed for violations.

Art

The Art Department sponsors visiting artists and lecturers, workshops and symposia. The University Museum provides students and the community with a full exhibition schedule of contemporary and historical art, as well as permanent collections of African Art, Egyptian Art, contemporary prints, and other varied pieces.

Music

The Department of Music presents annually some 200 concerts, recitals and other cultural events to the university and community at large. It offers many activities and programs in which students may participate as individuals or as groups. Qualified students, regardless of major, may participate in the numerous musical groups including the University Symphony Orchestra, the university bands, and a

variety of choral groups and small instrumental ensembles. Additionally the university's state-of-the-art recording studios are open for student use after proper instruction.

Theatre and Dance

The Theatre and Dance Department sponsors guest artists, demonstration/workshops, and a full season of theatre and dance productions with free admission for all full-time students. Additionally, all students, regardless of major, are invited to participate backstage or audition for departmental productions including those in the main season and in the daytime Lunchbox Theatre.

Communication

Programs in radio, television, and film are offered by the Department of Communication. WUMR-FM 92 is student operated. Two state-of-the-art television/film studios also offer students the opportunity to participate in broadcasting quality productions.

Publications

Students write and edit *The Helmsman,* the university newspaper (4 issues per week). *The DeSoto,* the university yearbook, is published under the auspices of Student Affairs.

Goodwyn Institute Lectures

The lectures and addresses offered by the Goodwyn Institute cover a variety of subjects. The purpose of these lectures is to provide a system of continued education for adults and youths along general and special interests, concentrating on illustrated lectures covering all areas of the world, and to afford authoritative and accurate information upon practical and cultural subjects.

HONORS AND AWARDS

Honor Societies

Alpha Epsilon Delta, international premedical honor society

Alpha Kappa Delta, the national honorary society in sociology

Alpha Lambda Delta, a national honor society for freshman students

Arnold Air Society, a national honor society for students associated with the Air Force ROTC Program

Beta Beta Beta, national honor society in biology

Beta Gamma Sigma, the national honor society for business majors

Black Scholars Unlimited, an honor society promoting academic experiences in scholarship, leadership, and service with special emphasis towards black students

Chi Beta Phi, a national science and mathematics honorary society

Eta Kappa Nu, a national honor society for electrical engineering students

Gamma Beta Phi, an honor and service society

Gamma Theta Upsilon, a national honorary society for geography students.

Golden Key National Honor Society, a national interdisciplinary honor society for academically outstanding juniors and seniors

Honors Students Association, an organization for University Honors students

Kappa Delta Pi, a national honor society in education

Kappa Kappa Psi, a national honor society for college and university band members

Kappa Omicron Nu, a national honor society for home economics students

Kappa Tau Alpha, a national honor society for journalism and mass communications juniors and seniors

Liberal Arts Honor Society, a local academic honor association founded by Phi Beta Kappa faculty members

Mortar Board, a national honor society established to provide for cooperation among honor societies for seniors

Omicron Delta Epsilon, an international economic honor society

Omicron Delta Kappa, the National Leadership Honor Society

Order of Omega, a national honor society for members of Greek fraternities

Phi Alpha Theta, the national honor society in history

Phi Eta Sigma, a national freshman scholastic honor society

Phi Kappa Phi, a national scholastic interdisciplinary honor society

Pi Delta Phi, a society to recognize outstanding scholarship in French language and literature

Pi Kappa Lambda, a national honorary society for music students

Pi Sigma Alpha, the national honor society in political science

Pi Tau Sigma, the national honor society in mechanical engineering

Psi Chi, the national honor society in psychology

Sigma Theta Tau, Beta Theta Chapter at Large of the International Nursing Honor Society

Sigma Delta Pi, the national Spanish honor society

Sigma Pi Sigma, a national honor society for physics students

Sigma Tau Delta, a national honor society for English language and literature students

Tau Beta Pi, a national engineering academic honor society

Who's Who Among Students in American Universities and Colleges, one of the highest honors that a student may receive at The University of Memphis

Honors and Awards

THE COLLEGE OF ARTS AND SCIENCES

THE BETA BETA BETA AWARD is annually presented to the graduating senior and member of the society who graduates with the highest grade point average in biology.

BIOLOGY FACULTY AWARD is presented to the undergraduate student who makes the most significant contribution to the department.

THE AMERICAN INSTITUTE OF CHEMISTRY AWARD is presented to the graduating chemistry major who best demonstrates leadership, ability, character and scholastic ability.

THE DEPARTMENT OF CRIMINAL JUSTICE annually presents the Mu Sigma Chi Professional Criminal Justice Award to the student of criminal justice deemed outstanding in professional activities.

THE DEPARTMENT OF ENGLISH offers several awards:

a. The Distinguished Scholarship Award presented each year to the English major whose work demonstrates an unusually high order of academic excellence.

b. Honors Thesis Award presented in recognition of the outstanding honors thesis by a student in the English Honors Program.

c. Giem and Collins Writing Contest: Presented for excellence in student writing produced in freshman and sophomore English courses. Rules and entry forms are available in Patterson, Room 463.

FRENCH GOVERNMENT ASSISTANTSHIPS: The French Government through the French Embassy in The United States, on the recommendation of the French Section of the Department of Foreign Languages, each year awards one or more assistantships in France for the teaching of English in secondary schools.

THE DEPARTMENT OF GEOLOGICAL SCIENCES annually presents the Outstanding Senior Award to the outstanding major exhibiting scholarship, leadership and service.

THE DEPARTMENT OF GEOGRAPHY AND PLANNING presents each year the Paul H. Sisco Award to the outstanding senior geography major.

THE DEPARTMENT OF HISTORY annually presents the Tennessee Historical Commission Award to that senior student of history judged by the faculty to be the outstanding history major. The department also presents an award for the outstanding paper presented by an undergraduate.

THE DEPARTMENT OF MATHEMATICAL SCIENCES annually presents the R. P. Clark Memorial Award to an outstanding junior.

THE DEPARTMENT OF PHILOSOPHY OUTSTANDING STUDENT AWARD is presented to that student of philosophy chosen on the basis of high scholastic achievement papers written, and performance in senior honors seminars.

THE DEPARTMENT OF PHYSICS each year presents the Outstanding Student Award to the most distinguished senior physics major.

THE DEPARTMENT OF POLITICAL SCIENCE presents the Outstanding Student Award each year to the graduating senior majoring in political science who has compiled the best record of academic achievement in the discipline. Also The John W. Burgess Award is presented for meritorious achievement in political science, and the Pre-Law Award is presented to the political science major whose pre-law studies demonstrate high promise for a distinguished legal career.

THE DEPARTMENT OF PSYCHOLOGY presents annually The Dr. Milton C. Addington Award for Excellence in Psychology to the senior psychology major exhibiting the most individuality, interest, initiative, integrity, creative ability and originality.

THE DEPARTMENT OF SOCIOLOGY annually presents The Outstanding Student Award to the senior student judged to be the outstanding sociology major Also the DIVISION OF SOCIAL WORK presents the Graduate with Distinction Award to the graduate who has been selected for dedication, achievement, and potential for professional service.

ALPHA EPSILON DELTA, pre-medicine and allied health professions honor society, annually presents the Student of the Year Award to the member who has demonstrated outstanding leadership, loyalty and responsibility.

CHI BETA PHI SCIENCE AWARDS: Students who have attained the highest academic average during their four years of study in each of the following disciplines: biology, chemistry,

geology, mathematical sciences, physics, and psychology are honored by having their names inscribed on a plaque.

THE FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS

DEAN'S AWARD FOR MOST OUTSTANDING STUDENT is presented to an outstanding student who has displayed strong leadership, outstanding character, and scholarship and who is active in department and campus activities.

SCHOOL OF ACCOUNTANCY OUTSTANDING GRADUATE AWARD is presented to the graduating student who has the highest overall scholastic average among all accountancy majors.

THE TENNESSEE SOCIETY OF CERTIFIED PUBLIC ACCOUNTANTS AWARD, Memphis Chapter, is presented annually to the graduating student who has the highest overall scholastic average among all accountancy majors.

THE OUTSTANDING ECONOMIC UNDERGRADUATE STUDENT AWARD is presented by the Department of Economics to a junior or senior economics student with the highest grade point average. A similar award is presented to the graduate student in economics.

THE MEMPHIS CHAPTER OF THE SOCIETY OF CHARTERED PROPERTY CASUALTY UNDERWRITERS annually awards a check and a plaque to the outstanding student in the field of insurance.

ACADEMIC EXCELLENCE AWARD FOR THE DEPARTMENT OF MANAGEMENT is presented annually to the B.B.A. graduate in management of the past year with the highest scholastic achievement.

ACADEMIC EXCELLENCE AWARD FOR THE DEPARTMENT OF MANAGEMENT INFORMATION SYSTEMS AND DECISION SCIENCES is awarded to the B.B.A. graduate of the previous year with the highest scholastic achievement.

OUTSTANDING UNDERGRADUATE MARKETING STUDENT is presented to a graduating student with outstanding scholastic achievement and service to the department, university, and community.

OUTSTANDING UNDERGRADUATE LOGISTICS/ MARKETING MAJOR is presented to a graduating student with outstanding scholastic achievement and service to the department, university, and community.

OUTSTANDING UNDERGRADUATE MARKETING MANAGEMENT MAJOR is presented to a graduating student with outstanding scholastic achievement and service to the department, university, and community.

OUTSTANDING UNDERGRADUATE SALES MAJOR is presented to a graduating student with outstanding scholastic achievement and service to the department, university, and community.

CRAWFORD DELTA SIGMA PI AWARD is awarded annually to an outstanding pledge member of the Delta Sigma Pi Fraternity who has demonstrated creative leadership skills and outstanding scholastic ability.

DELTA SIGMA PI, international business fraternity annually awards a scholarship key to the student in The Fogelman College of Business and Economics graduating with the highest academic average in business.

THE UNION PLANTERS/U of M FOGELMAN COLLEGE ALUMNI CHAPTER SCHOLASTIC ACHIEVEMENT AWARDS are awarded each semester to three graduating seniors in recognition of their outstanding scholastic achievement in the college. Award includes a check and their names inscribed on a plaque.

THE COLLEGE OF COMMUNICATION AND FINE ARTS

DEAN'S ACADEMIC ACHIEVEMENT AWARD is available to a student majoring in a discipline within the College of Communication and Fine Arts. It recognizes the graduating student with the highest grade point average.

DEAN'S CREATIVE ACHIEVEMENT AWARD is based on outstanding creative activity in the areas encompassed by the College of Communication and Fine Arts.

CREATIVE ACHIEVEMENT IN ART is awarded annually by the department for outstanding creative achievement in art to a senior majoring in art. A cumulative GPA of at least 3.0 is required.

"BEST OF SHOW AWARD," JURIED STUDENT EXHIBITION is awarded annually to the student whose work is judged "Best of Show" in the Annual Juried Student Exhibition.

THESIS AWARD IN ART HISTORY is presented in recognition of an outstanding masters thesis in art history.

ART HISTORY GRADUATE AWARD is presented annually to a graduate student for outstanding initiative and research.

ART HISTORY UNDERGRADUATE AWARD is presented annually to an undergraduate student for outstanding work in art history.

INTERIOR DESIGN ALUMNI STUDENT DESIGN AWARDS at the sophomore, junior, and senior levels are given for the best design of a given project.

SOCIETY OF PROFESSIONAL JOURNALISTS, Memphis Chapter, annually presents a certificate of achievement and a cash award to the student chosen as outstanding in the field of journalism.

SOCIETY OF PROFESSIONAL JOURNALISTS, SIGMA DELTA CHI MARK OF EXCELLENCE AWARDS, Arkansas, Louisiana, Mississippi, West Tennessee Region, annually presents first place awards for Best TV Broadcasting, Best Editorial Cartoon, Best Feature Article, and Best Photography Feature.

SIGMA ALPHA IOTA COLLEGE HONOR AWARD is an award based on musicianship, scholarship, and general contribution to the collegiate chapter.

SIGMA ALPHA IOTA HONOR CERTIFICATE is presented annually to the graduating senior of this chapter having attained the highest academic average.

PAUL EAHEART MEMPHIS WOODWIND QUINTET SCHOLARSHIP is presented in honor of Paul Eaheart for excellence in wind performance.

LUBRANI CLARINET AWARD, in memory of Professor Frederic Lubrani, is presented for performance ability, general scholarship, service to the Music Department, and potential in the profession.

SMIT COMPOSITION AWARD is presented in memory of Professor Johannes Smit for excellence in composition.

HEARST AWARDS are presented as the result of an annual national writing, broadcasting, and photography competition among accredited journalism programs for work appearing in student publications. Cash prizes range from $200 to $2,000 with matching awards going to sponsoring journalism departments.

KATHY KRIEGER MEMORIAL AWARD is awarded to students majoring in communication with a concentration in broadcasting based on academic merit, involvement in programs, and involvement with Radio Station WUMR.

HOHENBERG FOUNDATION, INC. AWARD is presented annually to a student pursuing a Bachelor of Fine Arts degree with a concentration in dance. The recipient must have at least a 2.50 GPA.

ART CENTER SUPPLY AWARD is given annually to a sophomore, junior, or senior majoring in graphic design. Selection is based on portfolio and academic performance.

MEMPHIS-GERMANTOWN ART LEAGUE AWARD is presented annually in the spring to an undergraduate art major who has demonstrated exceptional artistic abilities in any discipline within the Department of Art.

UNIVERSITY BOOKSTORE SUPPLY AWARD is given annually to an undergraduate art major. Selection is based on portfolio and academic performance.

NARAS SCHOLARSHIP AWARD is given to outstanding commercial music majors by the National Office and Memphis Chapter of the National Academy of Recording Arts and Sciences. Recipients are selected by a committee composed of music professionals and commercial music faculty.

THE LINN SITLER THEATRE AWARD is presented annually to an outstanding theatre student with a minimum GPA of 3.0.

THE SAUL BROWN AWARD is given to a journalism major concentrating in news writing. Saul Brown retired from the Memphis Press-Scimitar in 1980 as the newspaper's chief photographer. Selection for the award is based on talent, skill, and a student's promise as a journalist as demonstrated by his or her articles and/or photographs.

THE ALAN BUSSEL MEMORIAL AWARD is given to a senior journalism major with extraordinary service to African Americans who are pursuing careers in journalism. Applicants must have a minimum GPA of 3.0. Financial need is considered.

THE KAPPA TAU ALPHA AWARD is given to the member of Kappa Tau Alpha journalism honor society who has achieved the highest academic average.

THE COLLEGE OF EDUCATION

ELEANOR MAE FERGUSON AWARD is presented each year to the outstanding junior or senior woman physical education major who displays strong leadership, outstanding character, and high scholarship and who performs an active role in departmental and campus activities.

RALPH HATLEY SR. AWARD is presented to the outstanding junior or senior male physical education major who displays strong leadership, outstanding character, and high scholarship and who performs an active role in departmental and campus activities.

THE DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION OUTSTANDING SENIOR IN RECREATION AND PARKS AWARD is presented annually in recognition of meritorious scholarship, leadership and service to the university, the community and the profession.

THE DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION OUTSTANDING GRADUATE STUDENT IN RECREATION AND PARKS AWARD is presented annually in recognition of meritorious scholarship, leadership and service to the university, the community and the profession.

THE DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION HEALTH EDUCATION HONOR AWARD is presented annually to the undergraduate health education major with the highest overall grade point average.

THE DEPARTMENT OF INSTRUCTION AND CURRICULUM LEADERSHIP OUTSTANDING SENIOR AWARD is presented annually to an outstanding senior majoring in special education and rehabilitation who displays strong leadership, outstanding character and scholarship and takes an active role in departmental and campus activities.

THE KAPPA DELTA PI JUNIOR ACADEMIC ACHIEVEMENT AWARD is presented annually to the junior having the highest grade point average.

THE KAPPA DELTA PI SENIOR ACADEMIC ACHIEVEMENT AWARD is presented annually to the senior having the highest grade point average.

THE DEPARTMENT OF CONSUMER SCIENCE AND EDUCATION OUTSTANDING SENIOR AWARD is presented each year to the graduating senior in the department with the highest academic average.

THE MARQUITA L. IRLAND SCHOLARS AWARD is presented annually to a spring graduate with outstanding contributions in the areas of leadership, service to the community and the profession of home economics, and scholarship.

THE MEMPHIS EDUCATION ASSOCIATION AWARD is presented each year to the graduating senior who, having graduated from the Memphis City Schools System and completed all college level work in a teacher education program at the university, has attained the highest grade point average of the students in this category.

THE HEBER E. RUMBLE OUTSTANDING STUDENT TEACHER AWARD is presented each year to the student whose performance in student teaching is judged to be the most outstanding.

THE DEPARTMENT OF INSTRUCTION AND CURRICULUM LEADERSHIP OUTSTANDING EARLY CHILDHOOD MAJOR AWARD is presented annually to the early childhood education major who has demonstrated outstanding scholarship, involvement in professional organizations, and professional potential.

THE DEPARTMENT OF INSTRUCTION AND CURRICULUM LEADERSHIP OUTSTANDING ELEMENTARY EDUCATION MAJOR AWARD is presented annually to the elementary education major who has demonstrated outstanding scholarship, involvement in professional organizations, and professional potential.

THE DEPARTMENT OF INSTRUCTION AND CURRICULUM LEADERSHIP OUTSTANDING MASTER'S DEGREE CANDIDATE AWARD is presented to the master's candidate who has demonstrated outstanding scholarship, involvement in professional organizations, and professional integrity.

THE DEAN'S AWARD is presented annually on the basis of scholarship, professionalism, leadership, and service to the College of Education, the university, and/or professional organizations.

THE HERFF COLLEGE OF ENGINEERING

OUTSTANDING SENIOR AWARDS in the College of Engineering are presented to the outstanding senior, based on scholarship, in each of the following departments: electrical engineering, mechanical engineering, and engineering technology.

OUTSTANDING STUDENT MEMBER OF IEEE is presented an award by The Institute of Electrical and Electronics Engineers, student chapter.

THE THOMAS S. FRY AWARD is presented annually to the graduating Civil Engineering student who has demonstrated outstanding academic achievement.

THE T. S. WU DESIGN AWARD is presented annually to the graduating Civil Engineering student who has demonstrated outstanding design capability throughout the curriculum.

ASSOCIATED GENERAL CONTRACTORS AWARD is presented annually by the student chapter for outstanding achievement.

FRED H. KELLOGG AWARD is presented annually to the outstanding student in civil engineering that is most likely to be an outstanding professional engineer.

ASHRAE AWARD is presented annually to the outstanding junior in mechanical engineering.

ENGINEERING DEAN'S AWARD is presented annually to the graduating student who has compiled the highest academic achievement in the college.

ENGINEER-IN-TRAINING AWARD is presented to the student who achieves the highest score on the Fundamentals of Engineering examination, which is the first step in becoming a registered engineer.

SCHOOL OF NURSING

HIGHEST ACADEMIC ACHIEVEMENT AWARD is presented annually by The University of Memphis Nursing Alumni Association to the graduating senior in nursing who has the highest overall scholastic average.

OUTSTANDING STUDENT AWARD is presented annually to the graduating senior in nursing who best demonstrates academic achievement, leadership and professionalism.

UNIVERSITY COLLEGE

DISTINGUISHED SPECIAL PROJECT AWARD is presented to each student whose special project has been judged outstanding by the Faculty Council of University College.

ALUMNI ASSOCIATION AWARD is given each semester to the graduate who has received the highest grade point average in coordinated study.

FACULTY COUNCIL AWARD is presented to the graduating senior, each commencement, who has earned the highest overall grade point average.

DEAN'S AWARD FOR SPECIAL ACHIEVEMENT is given to honor University College graduates who have demonstrated academic achievement, leadership, professional and/or social commitment, and determination to complete a baccalaureate program

ACADEMIC ACHIEVEMENT AWARD is given to University College baccalaureate graduates who have demonstrated academic excellence and scholarly potential.

BORNBLUM JUDAIC STUDIES AWARD is presented to students who have excelled in the study of Hebrew Language and/or Judaic Studies.

OUTSTANDING PARALEGAL GRADUATE AWARDS are presented annually in cooperation with West Publishing Company to the two paralegal services graduates who best demonstrate achievement in academics and professionalism.

THE LEGAL RESEARCH AWARD is given annually to the paralegal student demonstrating exceptional mastery of the principles of legal research and writing.

OUTSTANDING OFF-CAMPUS STUDENT AWARDS are presented each year to the students (one undergraduate and one graduate) who, while taking courses away from the main campus, have demonstrated unusual commitment and scholarly endeavor in the pursuit of continuing their education. Consideration for the award may include grade point average, unusual family commitment, service to peers, ability to balance scholarly pursuit with work, family, and community service, and unusual service to U of M or Extended Programs.

DEPARTMENT OF AEROSPACE STUDIES

THE PRESIDENT'S AWARD is presented annually to the senior AFROTC cadet who has demonstrated outstanding attributes of leadership and high moral character. Selection is made by AFROTC, with final approval by the university president.

ARNOLD OF THE YEAR AWARD is presented to the member of Arnold Air Society who has given the most in service to the campus and the community.

DEPARTMENT OF MILITARY SCIENCE

SOLDIER'S MEDAL is awarded to cadets who distinguish themselves by an act of heroism at advanced camp.

ROTC MEDAL FOR HEROISM is awarded to cadets who distinguish themselves by an act of heroism performed on or off campus.

THE PRESIDENT'S AWARD is presented annually to the U of M senior cadet who has demonstrated outstanding attributes of leadership and high moral character. Selection is made by the department chair with final approval by the university president.

GEORGE C. MARSHALL ROTC AWARD is presented annually to the U of M senior cadet who has demonstrated outstanding leadership and scholastic qualities.

HUGHES TROPHY AWARD is presented annually to the cadet who is recommended by the professor of military science and the dean as the most outstanding commissioned graduate based upon officer potential and academic leadership.

PALLAS ATHENE AWARD is presented annually to the most outstanding graduating female cadet.

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION AWARD is presented annually to the most outstanding senior cadet who is recommended by the professor of military science and the dean as being in the top twenty five percent of the ROTC and academic class and who possesses an interest in the Transportation Corps.

ARMED FORCES COMMUNICATIONS ELECTRONICS ASSOCIATION HONOR AWARD is presented to a senior cadet majoring in math, chemistry, physics, engineering, or photography who is active on campus or academically distinguished and has demonstrated outstanding qualities of military leadership and high moral character.

ALDEN PATRIDGE COMMEMORATIVE AWARD is presented to the top graduating science or engineering student in the Army ROTC program.

DISTINGUISHED MILITARY STUDENT/GRADUATE AWARD is presented annually to senior cadets who are in the upper third of the ROTC class and upper half of the university class who are active on campus, are outstanding leaders, and possess an aptitude for military service.

DEPARTMENT OF THE ARMY SUPERIOR CADET DECORATION AWARD is presented annually to outstanding junior and senior cadets who have demonstrated academic leader qualities in scholastic and related activities and officer potential, and who are in the top twenty five percent of their ROTC and academic class.

AMERICAN LEGION GENERAL MILITARY EXCELLENCE AWARD is presented annually to the outstanding cadet who has demonstrated qualities in military leadership, discipline, character, and citizenship, and is in the top twenty five percent of ROTC and academic class.

AMERICAN LEGION SCHOLASTIC EXCELLENCE AWARD is presented annually to the outstanding junior and senior cadets who have demonstrated qualities in leadership and actively participated in student activities. and who are in the top twenty five percent of their ROTC class and the top ten percent of their academic class.

SOCIETY OF AMERICAN MILITARY ENGINEERS AWARD is presented annually to the junior and senior cadets who are recommended by the professor of military science and the Dean as being in the top twenty five percent of the ROTC and academic class and the outsfanding engineering students of the year.

ASSOCIATION OF THE UNITED STATES ARMY AWARD is presented to the junior who contributes the most, through leadership, to advancing the standing of the Military Science Department while in the top twenty five percent of the ROTC class and top ten percent of the academic class.

AMERICAN DEFENSE PREPAREDNESS AWARD is presented annually to the junior cadet who demonstrated outstanding leader qualities and participated actively in campus activities, placed in the top twenty percent of the platoon at Advanced Camp, received a B or above in all ROTC classes, and is in the upper half of the academic class.

ARMED FORCES COMMUNICATIONS ELECTRONICS ASSOCIATION SCHOLARSHIP AWARD is presented to Basic Course students accepted to the Advanced Course who are of high moral character, in the top twenty five percent of their academic class, and in need of financial assistance in completing a degree in electrical engineering or technical photography.

DAUGHTERS OF THE FOUNDERS AND PATRIOTS OF AMERICA AWARD is presented annually to a freshman or sophomore cadet who is in the top twenty five percent of the ROTC class and has demonstrated excellence in history, the potential for good leadership, and related accomplishments reflecting the ideals of patriotism.

DEPARTMENT OF NAVAL SCIENCE

TRIDENT HONOR SOCIETY AWARD is presented to outstanding Naval midshipmen who have demonstrated the highest caliber of academic excellence.

NROTC AWARDS

PRESIDENT'S AWARD is presented annually by the university president to a graduating senior who demonstrates outstanding attributes of leadership and high moral character.

NAVY LEAGUE OF MEMPHIS HONOR SWORD AWARD is presented to the Naval Graduate selected as the one Midshipman of the graduating class who has consistently demonstrated the highest leadership ability throughout the program.

RESERVE OFFICERS ASSOCIATION is presented annually to the outstanding freshman, sophomore, junior, and senior who have demonstrated above average scholastic achievements, exceptional mastery of previous Naval Science courses, and superior potential for commissioned service.

THE RETIRED OFFICERS ASSOCIATION AWARD is presented to the outstanding junior who has demonstrated above average scholastic achievement, high moral character. and exceptional potential for military leadership.

AMERICAN DEFENSE PREPAREDNESS ASSOCIATION AWARD is presented annually to an outstanding senior whose scholastic achievements are in the top half of the class and in the top one-fifth of NROTC enrollment at the university, who has shown active participation in athletics or campus activities and demonstrated outstanding leadership qualities.

SOCIETY OF THE WAR OF 1812 AWARD is presented annually to an outstanding sophomore whose scholastic average is within the upper quarter of the class, and who demonstrates the ideals of Americanism.

SONS OF THE AMERICAN REVOLUTION MEDAL is presented annually to an outstanding freshman who has demonstrated leadership, military bearing and all around excellence in NROTC program studies and activities.

NATIONAL SOJOURNERS AWARD FOR AMERICANISM is presented annually to a sophomore or junior who has demonstrated the ideals of Americanism, outstanding scholastic achievements and the potential to be an outstanding leader.

AMERICAN LEGION ROTC GENERAL MILITARY EXCELLENCE AWARD is presented annually to one freshman, sophomore, and junior, each of whose scholastic achievements are in the top quarter of the class and who have demonstrated outstanding qualities in military leadership, discipline, character and citizenship.

AMERICAN LEGION ROTC SCHOLASTIC EXCELLENCE AWARD is presented annually to a freshman, sophomore, junior, and senior, each of whose scholastic achievements are in the upper ten percent of the university and who have demonstrated high qualities of military leadership.

MILITARY ORDER OF THE WORLD WARS MEDAL is presented to a freshman, sophomore, junior, and senior who each have demonstrated marked improvement in military scholastic achievements.

VETERANS OF FOREIGN WARS AWARD is presented annually to a freshman, sophomore, junior and senior who each have demonstrated achievement and concentrated effort in Naval Science and academic subjects and demonstrated capability and diligence in the Naval ROTC program.

DAUGHTERS OF THE AMERICAN REVOLUTION AWARD is presented annually to a graduating senior whose scholastic achievements are in the top quarter of the class and who has demonstrated qualities of dependability, good character, adherence to military discipline, leadership ability and a fundamental and patriotic understanding of the importance of the ROTC program.

DAUGHTERS OF THE AMERICAN REVOLUTION CERTIFICATE is presented annually to a junior who best exemplifies the qualities of dependability, good character, adherence to military discipline, leadership ability and a fundamental and patriotic understanding of the importance of the ROTC program.

DAUGHTERS OF FOUNDERS AND PATRIOTS OF AMERICA AWARD is presented annually to an outstanding sophomore or freshman who demonstrates qualities of dependability, good character, discipline, leadership, and patriotism.

MILITARY ORDER OF FOREIGN WARS MEDAL is presented annually to an outstanding freshman, sophomore, and junior who each have demonstrated discipline, good character, and leadership ability.

AMERICAN VETERANS OF WORLD WAR II, KOREA, AND VIETNAM MEDAL is presented annually to an outstanding freshman with superior standing in military and academic subjects.

NAVAL INSTITUTE LEADERSHIP AWARD is presented annually to a graduating College Program student, Officer Candidate, and Marine Enlisted Commissioning and Education Program student who each have demonstrated outstanding potential for Naval leadership.

GENERAL DYNAMICS AWARD is presented annually to a Midshipman, Officer Candidate, and Marine Enlisted Commissioning and Education Program student who each have demonstrated outstanding leadership ability.

ARMED FORCES COMMUNICATIONS AND ELECTRONIC ASSOCIATION AWARD is presented to Midshipmen of good moral character, who are in the top fourth of their class, working toward a degree in electronics, communications, electrical engineering, mathematics, computer technology or intelligence systems, and who need financial assistance.

ARMED FORCES COMMUNICATIONS AND ELECTRONIC ASSOCIATION HONOR CERTIFICATE is presented annually to a junior who has demonstrated high achievement in leadership and in academics and is academically strong in electronics, communications, electrical engineering, mathematics, computer technology or intelligence systems.

NAVAL SUBMARINE LEAGUE AWARD is presented annually to the graduating senior who has demonstrated superior leadership ability and academic aptitude for entry into the Submarine Warfare Community.

MARINE CORPS ASSOCIATION AWARD is presented annually to the graduating Marine-option Midshipman or Marine who best exemplifies the leadership qualities and professionalism of a Marine officer.

MARINER OF THE YEAR is presented annually by the Naval Science Department to a member of the Mariners who has given most in service to the department, university, and community.

SPECIAL AWARDS

MARIA LEONARD SCHOLARSHIP AWARD is presented annually by Alpha Lambda Delta, national scholastic honor society, to the senior member of the society with the highest academic average.

GOLDEN KEY NATIONAL HONOR SOCIETY presents annually two scholarships to junior and senior members of the local chapter who have excelled in scholarship, leadership and participation in activities.

PHI KAPPA PHI SCHOLARSHIP AWARDS are presented annually to two undergraduate and one graduate member who demonstrate high scholastic ability and excellent leadership, who provide meaningful service to the university, and who will continue their studies at the university.

THE DAVID A. COLLINS-OMICRON DELTA KAPPA LEADERSHIP SCHOLARSHIP AWARD is presented to a member of the U of M Circle who will continue studies at the graduate level, who has shown responsible and effective leadership, who has made significant contributions to the student body, and who inspires and encourages others to use their leadership talents for the benefit of their peers.

THE HONORS PROGRAM DIRECTOR'S AWARD is presented to an honors student for outstanding academic performance in an honors curriculum.

THE JIMMY CARTER PRESIDENTIAL AWARD FOR VOLUNTEERISM is presented to that student who best exemplifies the spirit of volunteerism and action that helps alleviate human need.

THE JOSEPH R. RILEY STUDENT SERVICE AWARD is presented for outstanding service to the Honors Program and the Honors Student Association.

THE SAMUEL T. BOSWELL STUDENT LEADERSHIP AWARD is presented in recognition of outstanding leadership in campus issues and activities, example set for peers, and the display of personal and political courage, and/or community involvement.

ROSETTA I. MILLER AWARD is presented to the outstanding woman student who has returned to college despite significant hardships.

GREEK ALL-SING FOLLIES SCHOLARS MERIT AWARDS. Scholarships of $250.00 each are awarded annually by the Interfraternity Council to the pledge/ associate from the previous fall or spring semester who attained the highest grade point average, and to the fraternity member with the highest grade point average over the past two consecutive semesters.

THE WOMEN'S PANHELLENIC COUNCIL annually awards one $250.00 scholarship to the sorority member who has attained the highest scholastic average. In addition, a Pledge Scholarship in the amount of $250.00 is awarded to the fall semester pledge who attained the highest average for the semester.

TWO PANHELLENIC COUNCIL scholarships are awarded each spring to the PHC fraternity man and sorority woman who have obtained the highest cumulative grade point average for the previous year. Awards are in the amount of $250.00 each.

WOMEN'S INTERCOLLEGIATE ATHLETICS SCHOLAR AWARD is presented annually to the woman athlete who has maintained the highest grade point average while at the university.

THE ELMA ROANE OUTSTANDING WOMAN ATHLETE AWARD is presented to the junior or senior woman athlete who best exemplifies the following qualities: drive, enthusiasm, determination, concern for others, love for athletics, maturity, involvement in campus activities, and self discipline in all aspects of life.

CAMPUS RECREATION AND INTRAMURALS AWARDS are presented annually to the intramural Greek, intramural Independent Resident, Panhellenic Manager of the Year, and Outstanding Official of the Year who show leadership and interest in the intramural program.

3. EXPENSES

AND CHARGES

GENERAL: All university fees and charges are calculated and assessed consistent with policies and procedures of the Tennessee Board of Regents and The University of Memphis. Information in this catalog is intended to cover the situations that most students will encounter. However, the university may have additional policies and procedures by which fees and charges are implemented or that apply to unusual situations.

As a result of publication deadline requirements, the fee amounts indicated in this edition of the catalog are for the 1996-97 academic year. Because of rapidly changing conditions, it may become necessary to alter a fee structure before the next edition of the catalog is published.

REGISTRATION (ENROLLMENT) FEES

The information in this section concerning registration fees is applicable only to students enrolled in the undergraduate colleges and departments of the university. Similar information for students in The Graduate School and The School of Law is available in the catalogs of those schools.

FEE SCHEDULE:

RESIDENT (IN-STATE)

Hours	Maintenance	+	Activity	=	Total
1	92	+	4	=	96
2	184	+	8	=	192
3	276	+	12	=	288
4	368	+	16	=	384
5	460	+	20	=	480
6	583	+	34	=	617
7	665	+	34	=	699
8	747	+	34	=	781
9	829	+	34	=	863
10	911	+	34	=	945
11	993	+	34	=	1,027
12	1,056	+	34	=	1,090

NON-RESIDENT (OUT-OF-STATE)

Hours	Maintenance	+	Out-Of-State	+	Activity	=	Total
1	92	+	190	+	4	=	286
2	184	+	380	+	8	=	572
3	276	+	570	+	12	=	858
4	368	+	760	+	16	=	1,144
5	460	+	950	+	20	=	1,430
6	583	+	1,140	+	34	=	1,757
7	665	+	1,330	+	34	=	2,029
8	747	+	1,520	+	34	=	2,301
9	829	+	1,710	+	34	=	2,573
10	911	+	1,900	+	34	=	2,845
11	993	+	2,090	+	34	=	3,117
12	1,056	+	2,168	+	34	=	3,258

THE SUMMER SESSION: The summer session consists of two separate terms of approximately six weeks each, plus an extended term for specified courses. Enrollment fees for the summer sessions are determined solely on a semester hour basis. The 1996-97 semester hour charges are $92.00 for maintenance fees, $4.00 for student activity fees, and an additional $190.00 for out-of-state tuition.

MAINTENANCE FEES: Maintenance fees are assessed based on the course level and the number of hours enrolled. The maximum fees will be the graduate maximum ($1,303) during 1996-97 academic year), if a student is enrolled for any graduate level courses. Maintenance fee amounts quoted in the fee schedule above include the Debt Service and General Access Fee components.

TUITION: Students classified as out-of state residents by the Office of Admissions, using regulations provided by the Tennessee Board of Regents, pay the additional out-of-state tuition as indicated in the Fee Schedule above. Residency regulations of the TBR and information on appeals procedures are available in the Office of Admissions. RESIDENCY CLASSIFICATIONS MAY BE CHANGED ONLY BY THE OFFICE OF ADMISSIONS.

STUDENT ACTIVITY FEE: All students enrolled for one to five credit hours pay a part-time student activity fee of $4.00 per credit hour. All students enrolled for six or more credit hours pay a full-time student activity fee of $34.00. Students paying the full-time fee are entitled to admission to home athletic events, and certain health services, concerts, plays, and other student-sponsored activities and social events.

APPLIED MUSIC FEE: Certain music courses require an additional applied music fee of $45.00 per semester for each weekly one-half hour lesson. This fee is not included in the Fee Schedule above.

CHEMISTRY MATERIALS FEES: Certain chemistry courses require an additional materials fee of $25.00 per semester. This fee is not included in the Fee Schedule above.

NURSING CLINICAL PRACTICUM FEE: Certain nursing courses require an additional clinical practicum fee of $40.00-50.00 per semester. This fee is not included in the Fee Schedule above.

LATE REGISTRATION FEE: A late registration fee of $25.00, which is not included in the Fee Schedule above, will be assessed to each student who does not complete registration by the semester's first day of classes.

PAYMENT OF FEES AND DEBTS: Registration (enrollment) fees may be paid by cash, check, money order, Visa/ Mastercard/Discover, FINANCIAL AID/ SCHOLARSHIP AWARD(S), or University TIGER FUND$ account. Fees may be paid as soon as the student registers for courses and are due by the fee payment deadline date noted in the semester's *Schedule of Classes*.

The University offers a deferred (installment) payment plan to assist students with the payment of enrollment fees. Please refer to the *Schedule of Classes* for complete information on the University's Deferred Payment Plan for enrollment fees.

It is expected that a check or draft given to the university, for any reason, will be honored by the bank on which it is drawn. A check or draft dishonored by the bank on which it is drawn may be presented a second time at the discretion of the university. A $20.00 returned item fee will be assessed for any checks/drafts returned.

The privilege of making payments to the university by personal check and check cashing privileges will be revoked for any student who has had more than one returned check/draft with in a twelve month period. The suspension of this privilege will be for a period of one year from the date the last item is redeemed.

A student will not be permitted to satisfy registration fees by check if any previous check in payment of registration fees has been returned. **Students on a "NO CHECKS" status must be prepared to satisfy registration fees with cash, cashier's check, or by authorized credit card draft.**

INDEBTEDNESS TO UNIVERSITY: Policy of the Tennessee Board of Regents prohibits the enrollment of any person who owes the university any amount of money. All outstanding financial obligations to the university must be satisfied before a student will be allowed to register for courses. Tennessee law prohibits the release of grades, transcripts or diplomas of any person having outstanding financial obligations to the university.

REFUND OF REGISTRATION (ENROLLMENT) FEES: The following refund percentages of enrollment fees (Maintenance, Out-Of-State Tuition, Applied Music, Nursing Clinical Practicum, and Student Activity Fees) apply to students who withdraw from the university or who drop to an hourly load below full time:

A. 100% Refund: (1) A full (100%) refund of these fees will be provided until the semester's first day of classes, (2) for courses cancelled by the university, and (3) in the case of the death of the student.

B. 75% Refund: A 75% refund will be provided beginning with the semester's first day of classes and extending for a period of time as noted in the term calendar of the Schedule of Classes for each semester. A 90% refund of the Student Activity Fee will be provided during this period.

C. 25% Refund: A 25% refund will be provided beginning at the expiration of the 75% refund period and extending for a period of time as noted in the term calendar of the *Schedule of Classes* each semester. A 75% refund of the Student Activity Fee will be provided during this period.

D. At the conclusion of the 25% refund period, *there will be no refund of these fees.*

OTHER REGISTRATION (ENROLLMENT) FEE INFORMATION

RESIDENCY CLASSIFICATION: All determinations concerning the classification of students as in state or out of state for fee purposes are made in the Office of Admissions. The determinations are based on the regulations and guidelines of the Tennessee Board of Regents. If, for any reason, there is a question about a student's residency classification for fee payment purposes, the student is responsible for requesting a review of their residency status before classes begin.

ACADEMIC COMMON MARKET: Participation in the Academic Common Market allows qualified students from southern states to pay in-state tuition while pursuing certain degree programs at The University of Memphis. This arrangement is available only for students whose home states do not offer the designated program. The state in which the student *resides* determines which of the programs offered by The University of Memphis the home state will make available to its students.

The Academic Common Market is sponsored by the Southern Regional Education Board (SREB). Participating states are Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia (Florida and Texas grant access for graduate level programs only). Current SREB common market guidelines and requirements may be found on the web at *www.people.memphis.edu/~acadafflib/acm.html.*

Students may request through their home state coordinators that additional programs be made accessible. A list of the state coordinators with their addresses and telephone numbers may be obtained from the Office of Curriculum Planning. (Graduate students should contact the Graduate Admissions Office.)

In addition to certification requirements which the student's state of residence may specify, the following pertain: (1) Students must be fully admitted to a degree program that has been approved as an Academic Common Market program (nondegree students are ineligible); (2) students must obtain a letter certifying residency term of entry and approval for the particular University of Memphis program from their state's Academic Common Market coordinator.

NOTE: After enrollment, students remain eligible for in-state tuition only so long as they are continuously enrolled—consecutive fall and spring terms—in the *same* major for which they were originally certified. If students change major, they must process a *Change of Major* through their advisor and notify the applicant services office to change the Academic Common Market residency code on their records. **Failure to process the Change of Major and to notify applicant services may subject the student to out-of-state fees for all subsequent terms of enrollment in classes for a major other than the one for which the student received ACM certification.** Missing a fall or spring term of enrollment or a change of major requires that the student be recertified through the ACM coordinator in the student's state or residence.

FEES FOR TOTALLY DISABLED PERSONS AND PERSONS OVER 60 YEARS OF AGE: Persons who are domiciled in Tennessee and (1) have a permanent disability that totally incapacitates them from the potential to work at an occupation that brings them an income, or (2) who will become 60 years of age or older during the academic semester in which they begin classes, may AUDIT courses at The University of Memphis without paying tuition charges, maintenance fees, student activity fees, access fees, or registration fees. Admission to AUDIT will be limited on an individual classroom basis according to space availability.

Those who are totally disabled and those who will become 65 years of age or older during the academic semester in which they begin classes, and who are domiciled in Tennessee, may enroll for courses for credit at the cost of $46.00 per undergraduate semester hour, or $63.50 per graduate semester hour, not to exceed $75.00 per semester. University Health Services shall examine certification of permanent disability (not the applicant) and determine the eligibility of the applicant under this legislation.

Inquiries concerning these programs may be addressed to the Registration and Scheduling Office, Room 167, Administration Building.

MISCELLANEOUS FEES

APPLICATION FEE: Students submitting an application for admission to the university must pay, at the time of submitting their first application, a one-time, nonrefundable fee of $5.00.

COMMERCIAL MUSIC FEES: Students who wish to apply for credit for experiential learning in Commercial Music may obtain guidelines for this procedure from the Dean of the College of Communication and Fine Arts. A non-refundable $25.00 contract advising fee will be charged for the assessment of the portfolio. See "Experiential Learning Credit Fees" for related fee information.

CREDIT BY EXAMINATION OR PLACEMENT EXAMINATION: The fee for taking an examination for credit or a placement examination is $60.00 minimum and an additional $15.00 for each hour in excess of three (3) per course. These fees are non-refundable and must be paid prior to the examination.

DESOTO: Students at The University of Memphis may elect to purchase the university's award-winning yearbook, The Desoto, for a fee of $25.00.

EXPERIENTIAL LEARNING CREDIT FEES: Students who apply for credit for experiential learning will pay a fee of $30.00 per credit hour for which credit is awarded. For students enrolled under a *group contract,* a maximum fee of $180.00 will be assessed for credits assigned under the terms of the contract.

Currently the University College and the College of Communication and Fine Arts award credit for experiential learning. See "University College Fees" and "Commercial Music Fees" for related fee information.

MEALS: The university cafeterias, student centers and vending areas, open to all students, provide wholesome food at reasonable prices. The cost of meals per student is estimated to be $3,400 per academic year.

MUSIC LOCKER RENTAL: Music students are required to have a locker for storage of university-owned musical instruments or equipment. Personal instruments may also be stored in the locker. A fee of $5.00 per semester is assessed for the locker rental. Students will be expected to pay for any damages.

TRANSCRIPTS: There is no fee for transcripts. Transcripts are issued only at the request of the student in person or by letter. No transcript will be issued for a student who has any unfulfilled obligations to the university.

UNIVERSITY COLLEGE FEES: In addition to the $5.00 application fee, students who apply to the University College must pay a $40.00 fee, which includes a $15.00 non-refundable screening fee plus a $25.00 contract/advising fee, refundable if the application is not accepted.

VARIOUS COURSE FEES: Certain course offerings require various fees to obtain the necessary course related supplies. (Examples of such may be found in art, engineering technology, biology, etc., courses.) Any student already possessing the supply items required for completion of the course will be exempt from these fees.

WALL LOCKERS: University rental lockers are located in the following buildings: University Center (first floor), Engineering (first floor), Jones Hall (basement and third floors) and Graphic Arts (first floor). There is a $5.00 per semester fee for the rental of wall lockers. Wall locker fees are paid at the Bursar's Office (Administration 177). Wall lockers are assigned in Room 208 of the University Center after wall locker fees have been paid.

APPEAL PROCEDURES

APPEALS OF UNIVERSITY FEES/CHARGES/REFUNDS: Any individual may appeal the assessment, application, calculation, collection, or interpretation of any university fee, charge, deposit, or refund. The university has developed the following processes for an appeal:

Traffic Fines/Citations: Traffic fines and citations may be appealed through a separate process on forms available from the Parking Office, Office of Judicial Affairs, or the Student Government Association Office.

Residence Life: Appeals related to Residence Life financial matters should be filed first with the Office of Residence Life for processing. Decisions of the Office of Residence Life may be appealed in writing to the Office of the Associate Vice President for Finance.

All Other University Fees/Charges, Refunds, Etc.: A written appeal of all other financial matters should be filed first with the Bursar's Office on forms available from the Bursar. Decisions of the Bursar's Office may be appealed in writing to the Office of the Associate Vice President for Finance. The Bursar's Office will forward, without action, some appeals that it cannot address to the Office of the Associate Vice President.

The Office of the Associate Vice President for Finance will provide a decision in writing of those matters appealed to it. This decision may be appealed to the University Fee/Refund Appeals Committee. The recommendation of the committee will be forwarded to the Vice President for Business and Finance for a final decision, which will conclude the university's appeal process.

The listing of any fee or incidental charge in this publication does not constitute a contract between the university and the student. As a condition of registration, each student will pay the fees in effect for the semester for which he or she registers. All questions in regard to fees, fee payment, refunds, and appeals should be directed to the Bursar's Office, Room 176 Administration Building.

Fees are subject to change without notice. The university will usually collect the amount of fees due at the time of registration and during the adding and dropping of classes in accordance with the residency classification and fee rates in effect. After all enrollments are complete, any over-collections will be refunded and students will be billed for any under-collections.

Fees for AUDITING courses are assessed on the same basis as fees for credit courses. Courses offered between terms, for concentrated periods during a term, or at specific locations may be subject to fees on a per-hour basis only.

UNIVERSITY ID CARDS

The University of Memphis issues each student an identification card that bears the student's image and social security number. All students should obtain this permanent identification card that is used as the primary campus-wide method of determining privileges and accesses permitted each student. The ID card is required for the borrowing of library books, admission to or approval to pick up or purchase student tickets to athletic and social events, the sale of used text books, and other official purposes.

There is **no charge** to the student for the initial university ID card and it is automatically validated each semester the student enrolls and satisfies registration fees. The card remains the property of The University of Memphis and should be surrendered upon the request of any university official. Each student may possess only **ONE** university ID card at any time.

Students may obtain a replacement for a lost, stolen, or damaged university ID card from the ID Card Office in Room 171 of the Administration Building, between the hours of 7:30 a.m. and 6:00 p.m., Monday through Thursday, and 7:30 a.m.-4:30 p.m. Friday. Students will be charged a $10.00 fee to replace a card that has been lost or stolen. A charge of $2.00 will be made to change any data on an ID card.

TIGER FUND$

A personal **TIGER FUND$** account, which is accessed through the university ID card, is available to all students at The University of Memphis. **TIGER FUND$** is a declining balance money management program that provides students with a convenient way to obtain supplies and services on campus without the need to carry cash or the inconvenience of paying by check or credit card.

TIGER FUND$** is accepted at numerous campus locations including the University Store, Health Center, Ticket Office, and campus food service locations. **TIGER FUND$ is even accepted at various vending machines on campus for added convenience.

Additional information on the advantages and convenience of having a personal **TIGER FUND$** account may be obtained from the ID Card Office in Room 171 of the Administration Building.

STUDENT HOUSING

RESIDENCE HALLS: Charges for rooms in university residence halls are indicated below.

APPLICATION PROCEDURES: Applications for residence hall space may be obtained from the Office of Residence Life, U of M, Memphis, TN 38152. Because spaces are allocated by date of receipt and home address, completed applications accompanied by the required $100 application/reservation deposit should be returned to the Office of Residence Life as soon as possible. Checks or money orders should be made payable to The University of Memphis; please do not send cash.

Receipt by the Office of Residence Life of the housing application and $100.00 check or money order, however, does not guarantee admission to the university or to a residence hall. THE DIRECTOR OF RESIDENCE LIFE RESERVES THE RIGHT TO REFUSE ANY HOUSING APPLICATION, TO CHANGE OR CANCEL ANY ASSIGNMENT, OR TO TERMINATE A RESIDENT'S OCCUPANCY, FOR JUSTIFIABLE CAUSE.

CONTRACT PERIOD AND CONDITIONS: Fall assignments/contracts are for the full academic year (fall and spring semesters). Fall residents wishing to petition for release from their contract for the spring semester must do so in writing by November 1. Residents who cancel after this date, but before claiming their key for the spring semester, will forfeit 50% of their application/reservation deposit. Residents who fail to cancel by the completion of check-in will forfeit the entire deposit. The application/reservation deposit, once submitted with the application, covers the student's initial term of occupancy and all subsequent terms of occupancy and continues until such time as it is cancelled in writing. There will be no penalty if written cancellation is received before the published deadline for any specific contract period.

Residents claim and vacate their rooms according to directions issued by the Department of Residence Life. Returning and new residents will have claimed their spaces if any or all of the following procedures have occurred: (1) receiving the room key during the check-in period, (2) paying residence hall rent in full or in part by the last day of regular check-in, (3) returning the signed contract with the rent payment.

CANCELLATION POLICY: Full application/reservation deposit and pre-payment of rent will be refunded if: (1) the institution is notified in writing by the following cancellation deadlines for the first semester in which the contract is in force: July 1—fall residents; December 1—new spring residents; May 1—summer residents; (2) the student is prevented from entering the university because of personal medical reasons confirmed in writing by a licensed physician, (3) residence hall space is not available, (4) the applicant has not been assigned to a room at the time the applicant's written cancellation is received by Residence Life, or (5) the student is denied admittance or readmittance to the university. Full refund will be made in the case of death. Fall residents wishing to petition for release from their contract for the spring semester must do so in writing by November 1. NO REFUNDS WILL BE MADE FOR OTHER THAN THE ABOVE CONDITIONS.

Assigned residents who fail to cancel by the deadline referred to in (1) above but cancel by completion of check-in will forfeit 50% of their deposit. Assigned residents who fail to cancel by completion of check-in will forfeit their entire deposit. (This is applicable to both the fall and spring semesters.)

REFUND OF RESIDENCE HALL RENT: Refunds of residence hall rent after registration will be pro-rated on a weekly calendar basis when the student is forced to withdraw from the residence halls (1) because of personal medical reasons confirmed in writing by a licensed physician; or (2) at the request of the institution for other than disciplinary reasons. Full refund will be made in the case of death.

For reasons other than the above stated, the following procedure shall apply: 75% of rent will be refunded for withdrawal from the residence halls for a period of approximately 14 calendar days beginning with and inclusive of the first official day of classes or within an equivalent period for a short-term course; 25% of rent will be refunded following expiration of the 75% period, for a period of time extending approximately 25% of the time covered by the term. The periods during which refunds of 75% or 25% will be made are exactly the same as the periods during which the same refund percentages are made for maintenance fees. NO REFUNDS WILL BE MADE FOR OTHER THAN THE ABOVE CONDITIONS.

Dormitory	Type Room	Semester Rate*
Browning	Double	$830
	Single	1,175
McCord	Double	830
	Single	1,175
Rawls	Double	860
	Single	1,230
	Single w/o sink	1,070
Richardson	Double	920
	Single	1,310
Robison	Double	860
	Single	1,230
Smith	Double	860
	Single	1,230
West	Double	860
	Single	1,230
South	Double	960
Mynders	Double	800
	Single (small)	1,075
	Single (medium)	1,120
	Single (large)	1,150
	Single (private bath)	1,175
Student Housing Complex		
Apartment		1,500
Townhouse		1,550

* Fees quoted are for the 1997-98 Academic Year and are subject to change.

STUDENT FAMILY HOUSING: Student Family Housing is located on the South Campus approximately one mile from the main campus. Phase One consists of 56 one-bedroom townhouse apartments, 62 two-bedroom townhouse apartments, and 8 two-bedroom flats. All apartments are equipped with stove, refrigerator, garbage disposal, living room carpet, and venetian blinds. Electric central heat and air are also provided. An enclosed private patio is located to the rear of each apartment. The new Phase Two consists of 24 two-bedroom flats. These apartments are equipped with stove, frost-free refrigerator, garbage disposal, dishwasher, venetian blinds, thermal pane windows, hook-ups for stackable washers and dryers, and carpet in the living room and bedrooms. Gas central heat and air are also provided. Each apartment has a patio/balcony with a locking storage area. Four apartments are specifically designed for physically disabled students.

Application forms may be obtained from the Office of Residence Life. A $100.00 deposit is required when the application is submitted.

4. ACADEMIC REGULATIONS

APPEALS

Students have the right to appeal decisions made by university officials in the implementation of university policy. If a student feels that individual circumstances warrant an appeal, the request for appeal must be filed in the university office responsible for the implementation of that policy or the office specified in the policy statement.

CLASS ATTENDANCE

Class attendance may be used in computing grades at the discretion of the instructor. If attendance is to be used, a complete written statement of the instructor's policy detailing the weight of attendance in determining the final grade must be presented to all students present at the first and second meetings of the class.

A student who is absent from the final examination without the permission of the teacher incurs a grade of F on the examination and may, depending on the weight of the examination in determining the final grade, incur a grade of F for the course.

Students who receive VA benefits or Title IV funds for enrollment fees are subject to cancellation of future awards and immediate repayment of these benefits if they stop attending whether or not they officially withdraw or drop a course. The last known date of attendance will be reported by the instructor as the "unofficial withdrawal date". Students who stop attending will be assigned a grade of "F" in courses which do not reflect an official withdrawal.

Adding and Dropping Courses

After the official registration period is over, students may make adjustments in their schedules through the process of adding and/or dropping courses. (For dates and times, see the *Schedule of Classes.* See also the University of Memphis homepage on the web at *http://www.memphis.edu.*) Courses dropped through the last day of the Late Registration period will not be shown on the student's permanent record. Courses dropped after the Late Registration period will be indicated on the record as withdrawal grades for those courses. A student may drop any course or courses up through the date specified in the University Calendar for that term. (The University Calendar is located in the front of this *Catalog.*) Requests for exceptions must be made by the end of the next regular term following the term in which the grade was assigned. Exceptions are made only by the dean in the college in which the student is earning a degree, or by the dean's designee, and only on the basis of such extenuating circumstances as serious personal illness and relocation because of employment. To stop attending a class without officially dropping the course incurs the grade of F.

Withdrawal From University

Any student who wishes to officially withdraw from the university must do so in person through the Office of the Registrar in Student Information Services (Administration Building, Room 119). Students must complete an application for withdrawal. *Failure to officially withdraw will result in grades of F for the courses in which the student is enrolled.*

NOTE: From the beginning of registration for any term through the last date for late registration for that term, students withdraw in the Registration Center. See the *Schedule of Classes* for specific dates.

Withdrawal is not permitted beyond the dates specified in the University Calendar for that term. Requests for exceptions must be made by the end of the next regular term following the term in which the grade was assigned. Exceptions are made to this policy only in cases of such extreme circumstances as serious personal illness and relocation because of employment. Withdrawal requests after the deadline should be filed in the dean's office of the student's major college or the Academic Counseling Unit for students with no declared major.

Enrollment Transactions

Enrollment transactions include registration, adding and dropping courses, and withdrawing from the university. The official date shall be the date that the request is submitted to the Office of the Registrar, subject to the final review and approval of the Assistant Vice Provost for Enrollment Services. If the final review reveals any apparent violation of the university's academic regulations and/or contractual relationships between the university and the student, the Assistant Vice Provost for Enrollment Services has the authority to suspend the transaction pending joint review with the college dean, the department chair, and the student's academic advisor. If the joint review verifies the legitimacy of the transaction, the official date will be that originally established. If the joint review culminates in a finding that academic regulations and/or contractual relationships have been violated, the entire transaction may be permanently invalidated.

CLASSIFICATION OF STUDENTS

Classification of students is based on the number of college level credit hours earned as shown in the following table.

Classification	Semester Hours
Freshman	0-24
Sophomore	25-54
Junior	55-84
Senior	85 or more
Special	Students not working on a degree

In order to avoid a possible delay in graduation, students who have completed the required number of hours to be classified as juniors but who have not completed their basic requirements in the Lower Division should schedule these uncompleted requirements during the first semester following in which such courses are available.

Credit Hours and Maximum Load

The unit of credit at The University of Memphis is the semester hour; a semester hour is defined as the credit earned for the successful completion of one hour per week in class for one semester; or two-three hours per week of laboratory for one semester. (A course which gives three semester hours credit will normally meet for three lecture or recitation hours per week, or for two lecture or recitation hours and two-three laboratory hours per week; or for some other combination of these.) Each lecture hour presupposes a minimum of two hours preparation on the part of the student.

The minimum credit hour load for classification as a full-time student and the maximum loads are found in the table below. The maximum credit hour load includes all course enrollments for any term, both at The University of Memphis and any concurrent enrollment at other institutions. It does not include credit by examination. No student is permitted to enroll for correspondence or extension courses while carrying a maximum credit hour load.

ACADEMIC FULL-TIME CLASSIFICATION AND MAXIMUM LOAD

Term	Minimum Hours	Maximum Hours
Fall or Spring	12	**20.5
First or Second Summer	*	9
Extended Summer only	*	16
Any Combination of Extended, First or Second Summer Terms	*	16

* Any enrollment of less than 12 hours for all summer terms combined is defined as being less than full-time. The minimum hours of enrollment required for full-time classifications is 12 hours for any combination of Extended, First and Second Summer Terms.

**This maximum hour total includes the Applied Music Workshop (MUAP 1000) and the courses approved by the university to meet the physical activity course degree requirement. (See *Graduation from the University* for listing of approved courses.) A student who has a B (3.0) average or better for a semester may schedule, with the permission of the dean of the college from which the student is seeking a degree, a maximum of twenty-one hours for the following semester. Any or all of the above requirements may be waived at the discretion of the college dean or the dean's designee.

NOTE: ID card validation of full-time for student activity purposes is based on a minimum of six credit hours per semester and does not necessarily constitute a full-time academic load.

The maximum course load for any combination of concurrent summer terms is sixteen semester hours. The student's course load for the entire summer session may not exceed 16 semester hours. (This may differ from requirements for the Veterans Administration. Questions should be directed to the Office of the Registrar.)

ACADEMIC STANDARDS

Grades and Quality Points

GRADES

At the end of each semester or summer term, instructors report to the Office of the Registrar the standing of all students in their classes. The grade of a student in any course is determined by class standing and examination, combined in such proportion as the instructor in charge of the course may decide. Class standing in any course is determined by the quality of the student's work and the thoroughness of preparation.

The instructor's evaluation of the student's work is expressed by the following grades which are converted to quality points for the purpose of averaging grades.

Grade	Quality Points	Grade	Quality Points
A, Excellent	4	T (See below)	0
B, Good	3	CR, Credit	0
C, Satisfactory	2	W, Withdrew	0
D, Poor	1	AD, Audit	0
F, Failure	0	*S, Satisfactory	0
I, Incomplete	0	*U, Unsatisfactory	0

* The S/U grade is limited to certain types of courses such as practicums, practice teaching, etc. The IP (In Progress) notation may also be used in certain research courses to allow students time to complete research projects. These grades are only awarded for those undergraduate courses for which it is indicated in the course descriptions.

All courses for which the student is registered are recorded as passed (with a letter grade), "T," failed, dropped, withdrew, audit, credit, satisfactory, unsatisfactory, or incomplete. In no case is credit allowed in any course for which the student is not duly registered.

Grade of Incomplete

The grade of I (incomplete) indicates that the student has not completed the course for some unavoidable reason that is acceptable to the instructor. Unless the student completes the requirements for removal of "I" within forty-five days from the end of the semester or summer session in which it was received, the grade of "I" will be changed to an F, regardless of whether the student is enrolled or not. Extensions may be granted if the instructor's temporary absence from the campus makes it impossible for the student to remove the incomplete or in other circumstances acceptable to the instructor. *Grades of incomplete earned during the student's semester of proposed graduation will delay the student's graduation until the end of the semester during which the incomplete is removed.*

A grade other than "I" or "IP" may not be changed as a result of additional work performed by the student after a grade has been submitted to the Office of the Registrar. There is a Grade Appeals procedure described below.

"T" Grade

The "T" grade allows students to complete independent studies courses in variable time periods that might exceed a regular enrollment period. The following procedure governs the use of the "T" grade:

1. Prior to the registration period, the professor obtains approval of the chair and dean to use the "T" grade in a course(s).
2. The dean notifies the Office of the Registrar of courses for which the "T" grade may be awarded.
3. At the end of the regular term, the faculty member has the following options:
   a. Award grades A-F.
   b. Award an "I" grade if the faculty member feels that the work can be completed in 45 days. (If an "I" grade is awarded, a runner with the student's name on it will be sent to the faculty member during the 45-day period. The faculty member must record either an A-F or the "T" grade to prevent an automatic assignment of "F.")
   c. Award a "T" grade. If the "T" grade is awarded, the student must re-register for the course in order to earn credit. The "T" grade is not used in the computation of GPA.

Repetition of Courses

A student may repeat most courses in an attempt to improve the grade previously earned. There are some courses that may not be repeated for this purpose. Information concerning these courses may be obtained from the office of the chair of the department in which the course is offered. In some degree and major programs, there are restrictions on course repetitions even after drops or withdrawals. The student should *always* check with the major advisor *before* enrolling in a course a second or subsequent time(s).

The university is not obligated to allow substitutes for repetition of courses which have been deleted from the curriculum. Credit by examination may not be used for the purpose of improving a grade previously earned in a course taken for credit.

A student may not attempt the same course more than three times for the purpose of obtaining a passing grade or higher grade. Exceptions to this limitation may be made by the dean of the college from which the student intends to graduate, or by the dean's designee. These exceptions must be approved *prior* to the student's registration for the fourth and any subsequent attempts of the same course.

The student's grade point average will be computed as follows:

Attempt	Grade(s) Included In Computation
1st	Original grade earned
2nd	Only grade in 2nd attempt
3rd and subsequent	Grades earned in 2nd and all subsequent attempts calculated in quality point average.

The record will continue to reflect all grades earned in the same course.

Audit Courses

Students who are registered for one or more classes at The University of Memphis may also register to audit a course with the approval of the chair of the department in which the course will be offered.

Auditors are not required to prepare lessons or papers, or take examinations. They are not to take part in class discussions or laboratory or field work. Students auditing a course will receive "audit" on the transcript only if in the judgment of the instructor they have attended a sufficient number of classes to deserve the notation on the transcript. Faculty will base their decisions for awarding "audit" only on attendance, since the student is not allowed by policy to participate in any other way. Persons who are not enrolled for credit courses may register for audit courses with the approval of the Director of Admissions and the department chair. These persons must have graduated from high school or be 18 years of age or older. A student may not change from a grade point basis to audit or from audit to a grade point basis after the last day to add classes for that term. Fees for audits will be assessed on the same basis as fees for credit courses.

Credit/No-Credit Courses

The university, wishing to encourage mature students to broaden their range of interest without jeopardizing their grades, allows students who have earned at least

60 semester hours with a minimum grade point average of 3.0 to enroll in credit/no credit courses as determined by their college. Students are limited to one course per term and may not accumulate more than 12 semester hours on a credit/no-credit basis. (In most cases, Physical Activity courses are exempted from these requirements. See *Graduation from the University*.) Students who transfer from one college to another should be aware that credit/no-credit hours may be acceptable in one and not in another. Students may apply to take, on a credit/no-credit basis, a course that has been taken previously for a grade. In every instance, approval to register for a course on a credit/no-credit basis must be obtained from the advisor and the dean of the student's degree granting college. Credit hours earned on a credit/no-credit basis will be accepted toward degrees within the following limitations:

The College of Arts and Sciences accepts hours earned on a credit/no-credit basis in any course that is not required for the student's *degree*.

The Fogelman College of Business and Economics accepts hours earned on a credit/no-credit basis only in courses designated as electives in the student's *degree* program.

The College of Communication and Fine Arts accepts hours earned on a credit/no-credit basis in any course that is not required for the student's *major*.

The College of Education accepts hours earned on a credit no-credit basis in any course that is not required for the student's *major, professional educational requirements and endorsement requirements*.

The College of Engineering accepts hours earned on a credit/no-credit basis in any course that is not specifically required for the student's *degree*.

The University College accepts hours earned on a credit/no-credit basis in any course that is not required for a student's *Coordinated Study Program*.

A student who registers for a course on a credit/no-credit basis may change the registration to a letter grade basis only during the add period, and a student who registers for a course on a letter grade basis may change the registration to a credit/no-credit basis only during the add period. The student who successfully completes a credit/no-credit course will receive the appropriate number of hours as credit toward graduation. These hours will not be used in the computation of the grade point average.

Undergraduate Grade Appeal Procedure

This appeal procedure is designed to provide any undergraduate at The University of Memphis with a clearly defined avenue for appealing the assignment of a course grade which the student believes was based on prejudice, discrimination, arbitrary or capricious action, or other reasons not related to academic performance. **In all cases the complaining student shall have the burden of proof with respect to the allegations in the complaint and in the request for a hearing. Students pursuing the appeal procedure must proceed through steps 1-3 listed below and file for a hearing in accordance with the following time limits. Grade appeals for the fall semester must be filed in the Office of the Vice Provost for Academic Affairs by March 15 following the semester in which the grade was earned. Grade appeals for the spring or summer semesters must be filed in the office of the Vice Provost for Academic Affairs by October 15 of the same year.** If a student fails to pursue the procedure within the time limits, the disposition of the student's complaint made in the last previous step shall be final. If the dean or chair fails to respond to the student's complaint within the time limits, the Undergraduate Appeals Committee will act on the student's complaint. The procedure is terminated if the student and the instructor agree on the grade or if the student fails to appeal a decision within the appropriate time limit. All correspondence and records will be retained in the office in which the complaint is terminated.

Step 1 The student shall first consult with the instructor in an effort to provide a satisfactory resolution of the complaint. In the event the student cannot schedule a meeting with the instructor, the student may contact the department chair who will schedule the meeting between the student and the instructor. The only exception to this procedure is the case where the instructor is unavailable so that it is impossible to complete Step 1.

Step 2 If the complaint is not resolved in Step 1, the student may present the complaint in writing to the chair of the department in which the course was offered. The department chair will attempt to resolve the complaint in consultation with the instructor and the student within a *fifteen-day* period dating from the formal presentation of the written complaint. The department chair may, at his or her discretion, counsel with the faculty of the department.

If the department chair was the instructor of the course involved in the complaint or if for any reason the chair disqualifies him/herself, the student may proceed to Step 3.

The student's grade may be changed in Step 2 of the appeal procedure by the written consent of the instructor and the student.

Step 3 If the complaint cannot be resolved at the level or Step 2 within the prescribed fifteen-day time period. the student may appeal further by presenting to the dean of the college a written statement which clearly explains the basis of the appeal (prejudice, discrimination, arbitrary or capricious action, or other reasons not related to academic performance), the evidence for this appeal, and any supporting data. The chair must also forward a copy of all correspondence and records to the dean.

The dean may utilize any resources available to the dean's office to resolve the grade conflict within a *fifteen-day* period. If the dean finds that the request does not have merit, the dean shall so notify the student, the instructor, and chair. If the dean and chair are in agreement that the grade should be changed, either raised or lowered, the dean shall be empowered to change the grade without the instructor's consent. Otherwise the grade shall remain as recorded.

Either the student or the instructor may appeal the dean's decision made under Step 3 by filing, in the Office of the Vice Provost for Academic Affairs, a written request for a hearing before the University Grade Appeals Committee within the time limit set forth above. In the event of such an appeal the decision shall be stayed pending the completion of the procedure in Step 4 The dean must be provided a copy of the hearing request.

Step 4 The person requesting a hearing before the Grade Appeals Committee must complete a grade appeal form provided by the Office of the Vice Provost for Academic Affairs by March 15 for grades earned the preceding fall semester and by October 15 for grades earned the preceding spring and summer semesters. All supporting documents should be included with this form at the time of submission. The Vice Provost for Academic Affairs will forward the request to the chair of the undergraduate grade appeal committee. The chair will subsequently distribute copies of the request to the members of the committee for consideration. If the committee finds the student's or the instructor's request merits a hearing, the committee shall notify the student, the instructor, the chair and the dean of the time and location of the hearing. If the committee finds that the request does not merit a hearing, the student and the instructor shall be notified in writing.

The University Grade Appeals Committee shall function as a review board. The committee shall have the power to allow the assigned grade to stand or to raise or lower the assigned grade. All parties shall be notified, in writing, of the Committee's decision.

The decision of the University Grade Appeals Committee will be final.

The University Grade Appeals Committee shall be composed of seven members and seven alternates constituted as follows:

A chair designated by the Vice Provost for Academic Affairs, a faculty member and alternate designated by the dean of the college involved, two faculty members and two alternates elected by the Academic Senate, one student and one alternate from the college involved, two students and two alternates selected through the Student Government Association.

Although the primary responsibility of the committee is to review appeals, the committee will report any obvious discriminatory or capricious conduct on the part of either the student or the instructor to the appropriate Vice Provost for consideration and action.

COMPUTING GPA

In computing a student's grade point average, all courses attempted are included except credit/no-credit, audit, incomplete, remedial and developmental, and satisfactory/unsatisfactory courses and "T" grades. As an example: a student carrying five three semester-hour courses for a total of 15 semester hours makes the following grades: A, B, C, T, F, thus accumulating quality points in the amount of 12, 9, 6, 0, 0, for a total of 27. In computing the grade point average, the number of hours attempted (except "T" grade) (12) is divided into the quality points earned (27) for an average of 2.25.

Graduation: A minimum 2.0 grade point average on all work attempted is required for graduation.

Academic Fresh Start

An ACADEMIC FRESH START, allowing calculation of grade point average and credit hours toward graduation to be based only on work done after returning to college, is provided for undergraduate students who have gained maturity through extended experience outside higher education institutions and have demonstrated better than average academic performance following their return to The University of Memphis. Preliminary information and application forms may be obtained from the Academic Status and Retention Director. Requirements to be satisfied by a student requesting an Academic Fresh Start toward a baccalaureate degree are as follow:

1. Separation from all academic institutions for at least seven years.
2. After returning to college and prior to application for ACADEMIC FRESH START, completion of at least 24 semester hours of earned graded course work, at least six semester hours of which must have been successfully completed at The University of Memphis within one semester.
3. At the time of application, GPA of at least 2.5 for all work attempted after returning to college.
4. Formal application to the dean of the student's college, requesting that an ACADEMIC FRESH START be granted and describing an academic plan which must include the declaration of a major.

Upon approval of the college dean, the student will be granted an Academic Fresh Start. It may be granted once.The student's permanent record will remain a record of all work; however, the student will forfeit the use for degree purposes at The University of Memphis any college or university credit earned prior to the seven-year separation indicated above. The date of the fresh start will coincide with the date of re-entry following prolonged separation, and the permanent record will note that a fresh start was made and the date of the fresh start. The record will also carry the notation, "GPA and credit totals are based only on work beginning with that date." That date will be treated as the date of entry in determining which catalogs may be used for graduation.

The University of Memphis honors academic fresh start completed at other accredited institutions of higher education.

ACADEMIC STATUS AND RETENTION

At The University of Memphis, students' academic status is denoted by one of three conditions:

(1) GOOD STANDING
(2) ACADEMIC PROBATION
(3) ACADEMIC SUSPENSION

Official notification of academic status is by means of the grade report processed to each student at the end of the regular semester or summer session. The academic status of probation or suspension will be stated at the end of the report of grades. Policies and procedures related to each of these conditions are outlined in the following comments.

Good Standing

Students are in good standing so long as their combined college level and developmental studies grade point average is equal to the minimum cumulative GPA required on the sliding retention scale as defined in this policy statement. The term *good standing* indicates only that students are meeting the minimum standard for retention in the university. However, in order to meet graduation requirements, students must have a cumulative GPA of 2.0.

Academic Probation

A student will be placed on academic probation at the completion of any regular semester or summer session when the student's cumulative combined college level and developmental studies GPA falls below the following:

HOURS ATTEMPTED	MINIMUM GPA
14.99 or less	No minimum
15.00–29.99	1.40
30.00–50.99	1.70
51.00–67.99	1.90
68 and above	2.00

A student on academic probation who withdraws from the university during the first probationary semester will be "continued on academic probation." Withdrawal by such a student from any subsequent probationary semester will be treated as an academic suspension requiring clearance from the Academic Status and Retention Office for any future registration. Students who are enrolled on academic probation are allowed to register for the following semester. However, students whose grades result in an academic suspension will be automatically withdrawn from the university before classes for that term begin. For the purpose of participation in extracurricular and organizational activities sponsored by the university, students are considered in good standing and eligible to participate while on probation unless other requirements are specified by a particular group, organization, or activity.

Academic Suspension

Students on academic probation who, at the end of the following term of enrollment, fail to raise their GPAs to at least the required minimum on the Sliding Scale Retention Policy above will be suspended. There is one exception to this policy: students on academic probation will not be suspended at the end of any semester or summer session during which a term average of 2.00 has been earned.

(1) A student who incurs a first suspension must remain out of the university a minimum of one regular semester (fall or spring).

(2) A student who incurs a second suspension must remain out of the university a **minimum** of one calendar year.

(3) A student who incurs a third suspension must remain out of the university a **minimum** of three calendar years.

(4) A student who has been readmitted following a third suspension and who then fails to meet the retention standards is ineligible for further enrollment at The University of Memphis.

(5) Former The University of Memphis undergraduate students on academic suspension will be readmitted under the retention policy in effect their last semester at The University of Memphis. A counseling interview will be required prior to re-enrollment. Academic status will be determined by the Academic Retention Policy in effect in the current *University Bulletin*. Any course work attempted at another accredited college or university will be used in determining eligibility for readmission to The University of Memphis.

The university office responsible for the administration of this policy is the Academic Status and Retention Office (Room 117, Administration Building).

Recognition for Academic Performance

There are several means available by which students may obtain recognition for outstanding academic performance. In addition to those listed below, there are other honors and awards listed in the descriptions of the various honors programs.

THE DEAN'S LIST

The Dean's List is composed of those students who meet *one* of the following criteria:

1. Completion of 6-8 graded hours in a semester with a semester grade point average of 4.00.
2. Completion of 9-11 graded hours in a semester with a semester grade point average of 3.66 or above.
3. Completion of 12 or more graded hours in a semester with a semester grade point average of 3.50 or above.

When a course is being repeated for the purpose of improving a grade previously earned, the student must meet one of the criteria for the Dean's List eligibility as described above for *each* of two separate sets of courses and grade point averages:

(a) The number of graded hours and grade point average for *un*repeated courses taken during the semester.

and

(b) The total number of hours and overall term grade point average for *all* graded courses taken during the semester.

Remedial/developmental courses are not considered in calculating eligibility for the Dean's List. College level courses used to satisfy high school deficiencies will be considered in the computations to determine eligibility for the Dean's List.

GRADUATION WITH DISTINCTION

Students who meet the requirements described below are eligible to graduate cum laude, magna cum laude, or summa cum laude:

1. Fulfillment of graduation requirements
*2. Completion of a minimum of fifty (50) graded semester hours at The University of Memphis prior to graduation
3. Final cumulative quality point averages as follow:

Cum Laude	*3.2500—3.4999*
Magna Cum Laude	*3.5000—3.7999*
Summa Cum Laude	*3.8000—4.0000*

*Recognition of graduation with distinction at commencement ceremonies will be based on the completion of a minimum of forty-five (45) graded semester hours at The University of Memphis prior to the final semester. (During the final semester, the student must also be enrolled for a sufficient number of hours to complete the required minimum of fifty.) This recognition is not an actual conferral of distinction.

In order to be eligible, a student who transfers course work from another institution must have made the required average on all work taken at The University of Memphis and must, in addition, have an overall average that meets the honors requirements above. In no instance may the GPA used for determining graduation with distinction be higher than that earned on courses taken at The University of Memphis.

A student who already holds a baccalaureate degree is eligible for these distinctions if the requirements above (1-3 and following paragraph) are met and if, within the hours presented to fulfill the requirements for the second degree, at least forty-five additional graded hours have been taken at The University of

Memphis subsequent to the award of the first degree. (These hours would be for *new* courses, *not* courses repeated for a higher grade. University of Memphis hours earned prior to the awarding of the first degree may count toward the fifty-hour minimum in requirement 2 above.) The GPA used for determination of distinction for the second degree will be calculated from *all* undergraduate courses taken. College level courses used to satisfy high school deficiencies will be considered in the computations to determine eligibility for graduation with distinction.

Either the complete set of requirements governing graduation with distinction in the current catalog or the complete set in the catalog governing the degree requirements for the student's graduation may be used to determine honors.

PRIVACY RIGHTS OF PARENTS AND STUDENTS

The Family Educational Rights and Privacy Act of 1974, with which the university intends to comply fully, is designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with The Family Educational Rights and Privacy Act Office (FERPA) concerning alleged failures by the institution to comply with the Act.

The provisions for the release of information about students and the rights of students and others to have access to The University of Memphis education records are published in their entirety in the University of Memphis Procedure – Privacy of Education Records – which is available in the offices of the Registrar or the University Counsel. A summary is published each semester in the *Schedule of Classes*.

ADDITIONAL MEANS OF EARNING CREDIT

Advanced Standing Credit

Credit toward a degree will be accepted only from college-level institutions for courses that are substantially equivalent to those offered at The University of Memphis. After the student has been approved for admission as a regular undergraduate, the Office of Admissions will evaluate credits for university-wide use. The Office of the Dean in each college has the authority for determining the use of acceptable credit toward specific degree programs in that college. (Also see Transfer Credit section below.)

In computing the scholarship ratio or grade point average of a student who has earned an associate degree from an institution with a grading practice that does not reflect failing grades, only those courses for which credit was granted will be used. A student who does not earn the associate degree prior to transfer or one who attends merely to take courses will have the grade point average computed using all courses attempted at that institution.

Transfer credit from colleges not accredited by the Tennessee State Board of Education and/or the Southern Association of Colleges and Secondary Schools (or corresponding agencies for other states and regions of the United States) will not be accepted toward a degree or toward teacher licensure.

Credit for Service in the Armed Forces

Veterans who have completed one year or more of continuous full-time active military service will be excused from taking the required physical activity course(s) but must take HMSE 1100, *Concepts of Fitness and Wellness*. In addition, six semester hours of health and physical education credit will be allowed upon presentation of a copy of the veteran's report of separation (DD Form 214) to the Admissions Office. Veterans with less than one year of continuous full-time service who have completed recruit (basic) training while on active duty will be awarded credit as recommended in the appropriate military branch *Guide to the Evaluation of Educational Experiences in the Armed Forces*. Total physical activity course credit applicable to the baccalaureate degree cannot exceed 8 semester hours, regardless of the source.

The Admissions Office should be consulted to determine whether additional credit may be allowed for training completed through formal service schools (DD Form 295). Certain subject standardized tests offered by the Defense Activity for Non-Traditional Education Support (D.A.N.T.E.S.) may be submitted for consideration. Official D.A.N.T.E.S. transcripts are required. The maximum amount of credit accepted for applicable D.A.N.T.E.S. courses and/or correspondence and extension courses is 33 semester hours, and 20 semester hours of lower division credit for selected service schools. (This restriction does not apply to credit accepted by the University College.) An official evaluation of service credit is not made until a student has been accepted as a regular undergraduate student. Credit awarded for completion of selected service schools will be governed by the recommendations at the baccalaureate level as outlined in the current *Guide to the Evaluation of Educational Experience in the Armed Services*.

Noncollegiate Sponsored Instruction

Credit may be obtained for applicable courses completed through certain noncollegiate sponsored instruction as recommended in the current *A Guide to Educational Programs in Noncollegiate Organizations*. No more than 20 semester hours credit for service schools and/or noncollegiate sponsored programs will be allowed. The Admissions Office should be contacted for further information.

Advanced Placement Credit

The University of Memphis participates in the Advanced Placement Program of the College Entrance Examination Board. To be eligible for credit, students must score a three, four, or five on the CEEB Advanced Placement Tests. Information pertaining to approved scores and credit to be awarded may be obtained from the Admissions Office.

International Baccalaureate

The University of Memphis recognizes high school students' participation in the International Baccalaureate Program and awards limited college credit for completion of selected courses. To be eligible for credit, students must earn a score of "4" or higher. Specific information on score and credit requirements are available in the office of applicant services.

Transfer Credit

After enrollment as regular undergraduates at The University of Memphis, students should obtain prior approval from the dean of the college from which they are to graduate before taking a course at another institution for the purpose of meeting degree requirements at The University of Memphis. The student who intends to take a course at another institution should consult with the Admissions Office and obtain forms for use in securing the dean's approval. Courses taken without prior approval are subject to possible disapproval when they are presented for evaluation at The University of Memphis.

Before credit earned at another institution can be transferred and recorded on a permanent academic record, the student must have an official transcript mailed to the Admissions Office and must contact the college dean's office to make arrangements for the posting of transfer credit by having the original copy of the form returned to the Admissions Office.

The maximum credit hour load allowed for any term includes all course enrollments both at The University of Memphis and any concurrent enrollment at other institutions. (See "Credit Hours and Maximum Load.")

Correspondence or Extension Credit

The University of Memphis accepts a limited number of credits earned by correspondence and/or extension, provided that such credits are taken from an institution that is a member of the University Extension Association, or the appropriate regional accrediting association. The University of Memphis offers some work by extension but none by correspondence.

Prior to a student's initial registration at The University of Memphis as a regular undergraduate, the Admissions Office will, at the time the student applies for admission, determine the acceptability of extension and/or correspondence credits earned at other institutions. After the student has been admitted as a regular undergraduate, whether a beginning freshman or a transfer student, credit applicable to any University of Memphis degree will not be given for subsequent correspondence or extension courses unless written permission from the dean of the degree granting college is obtained prior to enrollment in such courses.

No student is permitted to enroll for correspondence or extension courses while carrying a maximum load at The University of Memphis. Not more than one-fourth of the semester hours applied on the bachelor's degrees may be earned by correspondence or extension or a combination of the two. (This restriction does not apply to degree programs of the University College.)

A student who has completed thirty-three of the last sixty-six hours required for residence and who lacks no more than four semester hours toward completion of degree requirements may earn these final credits by acceptable correspondence or extension work, or by residence at another approved institution. In those instances in which the dean's office has granted such approval, thirty-three of the last *seventy* hours will have been completed at The University of Memphis. (For details of residence requirements, see *Graduation from the University*.)

Credit by Course Placement

In some departments, students who have obtained prior approval from the department chair may enroll in a University of Memphis course at the level for which they feel previous training or experience qualifies them and receive credit for certain sequential courses numbered lower than the one in which they enroll. Recording of credit for the lower numbered course(s) is contingent upon completion of the course with a grade of C or higher. Upon completion of the course *written application to the chair of the department and payment of appropriate fees are required for such credits to be recorded.* There is a fee for all placement credits that are recorded. It is the same as that for credit earned through credit by examination. For information on the fees, see *Expenses and Aid.*

FOREIGN LANGUAGE: In the Department of Foreign Languages and Literatures, all of the requirements and fees listed above are applicable and *credit by course placement is limited* to the following courses: Students whose first college-level course in a language is 2201 may apply to the department chair for credit for 1102 in that language, those whose first college-level course is 2202 or 2203 may apply for credit for 1102 and 2201 in that language, and those whose first college-level course in a language is a 3xxx course in composition and/or conversation may apply for credit for 1102, 2201 and 2202 in that language.

University Credit by Examination

Credit by examination refers to all of the types of credit described following this paragraph. Students may not take any examination for credit in a course previously taken for credit except to validate transfer courses for upper division credit. Students may, however, take an examination for credit in courses that were audited or in courses at a lower level than one that was taken for credit. Credit by examination may not be used to satisfy the Computation Intensive, Writing Intensive and Integration General Education requirements.

CLEP EXAMINATIONS

CLEP is a national program of credit-by examination, sponsored by the College Entrance Examination Board. It offers students the opportunity to obtain recognition for college-level achievement. Some departments accept CLEP subject area examination credits as equivalent to departmental courses. No credit will be awarded for CLEP general examinations. Information on courses for which CLEP credit is available, along with information of fees charged, is available in the Testing Center.

DEPARTMENTAL EXAMINATIONS

Almost all courses in the undergraduate curricula, except for those of laboratory, research, and performance variety, are available for credit by examination. Students who believe they have already mastered the material of a particular course offered at The University of Memphis may take a departmentally administered examination for credit in that course. Students should consult the department chair to make application and to obtain information concerning the courses offered.

The following regulations govern the granting of credit by examination:

1. Any student who has been admitted to The University of Memphis—full-time or part-time—may make application to take an examination for credit. A student who has been admitted but who has not yet registered for courses at The University of Memphis will have any credit earned by examination posted to the permanent record after enrollment. Any student (other than first-time freshmen) must have a 2.0 GPA to apply for credit by examination.

2. Permission to take a credit examination must be obtained from the chair of the department in which credit is sought and from the dean of the college in which the student is seeking a degree. When permission is granted and after payment of the cost of the examination, the Admissions Office will issue an official permit for the examination (See *Fees and Charges*).

3. The form of the examination, the method of administering it, and the time of examination are left to the discretion of departments.

4. To receive credit, the student's examination grade should be a grade equivalent of at least a C. There are no university restrictions governing the number of credit hours which may be earned through credit by examination; however, the individual colleges may have some limitations. Students should check with the specific college concerning its degree requirements. Credit is indicated on the student's record as CR.

CREDIT BY PLACEMENT EXAMINATION

In some departments in which placement examinations are given, a student may elect to receive credit for certain sequential courses numbered lower than the course in which the student was placed if prior approval was obtained from the chair.

(The Department of Foreign Languages and Literatures does not grant credit on the basis of placement examinations. See *Credit by Course Placement* above.)

A student may take the placement test, which is given at the beginning of each semester, to best determine the initial course in which to be placed. A student completing the placement test may apply immediately for the hours of credit warranted by the test score. The student must make written application to the chair of the department and make payment of appropriate fees for such credit to be recorded. There is no fee charged for taking placement examinations; however, there is a fee for all placement credits that are recorded. For information on the fees, see *Expenses and Aid.*

University Credit for Experiential Learning

Students seeking degrees in the College of Communication and Fine Arts, the College of Education, and the University College may be granted credit for college level knowledge and understanding gained from work experience, life experience, or for certain non-traditional instruction. The student who wishes an assessment of such learning prepares a detailed and documented portfolio of those learning experiences that are to be evaluated.

Assessment by portfolio is reserved for knowledge and competencies which do not readily fit into the credit by examination procedures described above. More detailed information about procedures may be obtained from the individual colleges. For fee information, see *Expenses and Aid.*

5. GRADUATION FROM THE UNIVERSITY

GENERAL REQUIREMENTS

Courses required for all baccalaureate degrees are outlined in the following section; specific requirements for the individual degrees are in the *Colleges and Degree Programs* section. Requirements for the Juris Doctor degree are in the Catalog of The School of Law; requirements for graduate degrees are in the Catalog of The Graduate School.

The following have been established as minimum requirements by the university for all undergraduate degrees offered. **In addition, the student must meet the requirements for the specific degree as established by the college or department in which it is offered.** A minimum of 132 semester hours is required for all degrees except the accountancy major in the B.B.A. degree. In some degrees and majors, the courses that may be used to meet the university requirements below are specified. The assistance of an advisor for the particular degree and major must be sought to determine which courses will meet degree requirements.

1. GENERAL EDUCATION

The general education program is that part of the undergraduate curriculum that promotes a common background for all baccalaureate candidates. The purpose of the general education program is threefold: to help students develop the skills necessary for completing a college career and assuming an active role in contemporary society; to assist students in gaining an awareness of the diversity of human endeavors in intellectual, creative, social and technological spheres; and to help students develop analytical and critical faculties that can be applied across the range of issues confronting them in the modern world. The general education program extends beyond particular disciplines and majors to make available to students the tools and awareness necessary for active, lifelong learning and for active, literate participation in society.

A. English Composition: 6 hours

ENGL 1101	English Composition
ENGL 1102	English Composition and Analysis

All candidates for graduation at The University of Memphis are required to complete English 1101 and 1102, or their equivalents, with a grade of C or better. Before enrolling in English 1101, a student must have either (1) an ACT English score of 19 or above, or (2) an SAT verbal score of 360 or above, or (3) a satisfactory completion of a placement essay administered by The University of Memphis Testing Center. Those who do not must successfully complete R&DS 0810 with a grade of C or better before proceeding to English 1101. English 1101 and 1102 must be taken in sequence; no credit will be allowed for English 1102 until 1101 has been completed successfully.

B. Oral Communication and Rhetoric: 3 hours

COMM 2381	Oral Communication

C. Mathematics: 3-6 hours

MATH 1181-1182 (6)	Concepts of Number/ Concepts of Algebra
MATH 1312 (3)	Elementary Calculus
MATH 1321 (4)	Analytic Geometry and Calculus
MATH 2000 (3)	Experiences In Mathematics

D. Literary Heritage: 3 hours

ENGL 2201	Literary Heritage
ENGL 2202	Literary Heritage: African-American Emphasis

E. Fine Arts Heritage: 3 hours

ART 1101	Introduction to Art
COMM 1851	Introduction to Film
DANC 1151	Introduction to Dance
MUHL 1101	Music Appreciation
THEA 1551	Introduction to Theatre

F. Historical/Philosophical Heritage: 6 hours
Select one from **each** group.

1. Pre-1500: 3 hours

CLAS 2481	Mythology
HIST 1301	Development of World Civilization I
PHIL 1101	Classical Issues in Philosophy
POLS 1101	Introduction to Ancient Political Thought
UNIV 2850	Religions of Abraham: Judaism, Christianity, Islam
UNIV 3580	Hebrew and Greek Legacy

2. Post-1500: 3 hours

HIST 1302	Development of World Civilization II
PHIL 1102	Values and the Modern World
POLS 1102	Introduction to Modern Political Thought
UNIV 2860	Historical/Philosophical Perspectives on Cultural Confrontations
UNIV 3581	Faith, Reason and Imagination

G. *American Heritage: 6 hours

HIST 2601	The United States to 1877
HIST 2602	The United States Since 1877

Thematic Courses: **One** of the following may be taken in lieu of **either** HIST 2601 **or** 2602:

ANTH 3282	Cultural History of American Communities
GEOG 3401	Historical Geography of the United States
HIST 3863	Social and Intellectual History of the United States
HIST 3900	History of Tennessee
HIST 4851	History of Women in America
HIST 4881	Black American History
POLS 4212	Constitutional Law: The Origins and Evolution of Civil Liberties in the United States
POLS 4405	Origin and Development of American Political Thought
SOCI 3422	Racial and Ethnic Minorities: A Socio-Historical Approach

*This requirement is waived for engineering students and students enrolled in University College except for those who did not earn one unit in American History in high school. The state requires that students who did not earn one unit in American History in high school fulfill the American Heritage requirement during their first or second year at the university. Those students who use the G.E.D. rather than high school graduation for admission to the university will be considered as having the equivalent of a Tennessee high school diploma and thus, to have had the equivalent of American History in high school. This does not mean that a student admitted to The University of Memphis may take the G.E.D. as an exam for credit in American History.

H. Social Science: 6 hours (One course from list 1 **and** one from list 1 or list 2)

1. Global Perspective: (One **must** be selected from this group)

ANTH 1200	Cultural Anthropology
CJUS 2110	Comparative Justice Systems
ECON 2110	Introduction to Macroeconomics
GEOG 1301	Survey of World Regions
GEOG 1401	Introduction to Cultural Geography
POLS 2301	Comparative Politics
POLS 2501	International Politics
PYSC 2201	Deviance: Its Role in History and Culture
SOCI 2100	Sociology of International Development
SOCI/CSED 2101	The Family in Global Perspective
UNIV 2304	Gender and Society

2. (One may be selected from this group **or** list 1)

ANTH 1100	Human Origins and Variation
CJUS 1100	Introduction to Criminal Justice
ECON 2120	Introduction to Microeconomics
POLS 1100	American Government
PSYC 1101	General Psychology
SOCI 1111	An Introduction to Sociology

I. Natural Science: 8 hours (Sequence required)

BIOL 1071/1072-1081/1082	Biology: A Human Perspective
BIOL 1151/1152-1161/1162	General Biology I & II
CHEM 1101-1102	College Chemistry I & II
CHEM 1121/1131-1122/1132	Principles of Chemistry
GEOG 1001/1011-1002/1022	Introduction to Environmental and Earth Science
GEOL 1101-1103	Physical and Environmental Geology
PHYS 1001/1010-1002/1020	Introductory Physics and Astronomy
PHYS 2003/2510-2004/2520	Physics for Science and Engineering
UNIV 1610-1611	Natural Science

J. Fitness and Wellness: (4 hours)

HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825; 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000.

Any student except those with a major or minor in Physical Education or those seeking a B.B.A. degree has the option of taking the activity courses for a letter grade or on a credit/no credit basis. A student unable, for medical or other reasons, to take regular physical activity courses is required to register for an adaptive class, or otherwise follow recommendations of the Chair of the Department of Human Movement Sciences and Education.

Students completing NAVY 1100,1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

Only students in the following programs may apply more than 8 semester hours of physical activity credit to the minimum degree requirement of 132 semester hours (see specific college limitations) Exercise and Sport Science major, Sport and Leisure Studies major, B.F.A. Theatre major with a concentration in Performance or Dance, Theatre or Dance minor.

K. Computation Intensive [C]: (3 hours)
At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

L. Writing Intensive [W]: (3 hours)
At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

M. Integrative [I]: (3 hours)
At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

NOTE: Under most circumstances, transfer courses may not be used to satisfy the Computation Intensive, Writing Intensive, and Integrative requirements.

2. COMPUTER LITERACY

Students who entered The University of Memphis or any other institution as beginning freshmen in fall 1984 or later, are required to possess competency in computer literacy before graduating. Competency may be gained by either passing grades in designated coursework or passing a specially designed test. Courses that fulfill this requirement are specified by the college in which the student is enrolled for a degree. Students interested in taking the test should consult their college dean.

3. GRADE POINT AVERAGE

To receive a bachelor's degree from any of the colleges in the university, students must have a grade point average of at least 2.00 (i.e., two quality points for every semester hour attempted). If for any reason a student offers more than 132 semester hours credit for graduation, the ratio of two quality points to one semester hour of credit must be maintained. To attain this standard the candidate must have a C average on all courses attempted in the university. Students with transfer credit are required to maintain an average of C on all courses taken at The University of Memphis.

4. RESIDENCE REQUIREMENTS

A student will satisfy residence requirements for graduation by earning at least twenty-five (25) percent of credit hours required for the degree at The University of Memphis. Thirty-three (33) of the final sixty-six (66) hours required for the degree must be completed at The University of Memphis. A student transferring credits from a two-year college institution must complete, as a requirement for the baccalaureate degree, a minimum of sixty semester hours in an accredited senior institution.

In addition, the student must meet the residence requirements for the specific degree as established by the college in which it is offered. Exceptions to residence requirements can be authorized by the appropriate dean. Residence requirements for specific degrees within each college may be found in the *Colleges, Degree Programs and Courses* section. For more details, the student should inquire in the office of the dean of the appropriate college.

A student who has completed thirty-three of the last sixty-six hours required for residence and who lacks *no more* than four semester hours toward completion of degree requirements may earn these final credits by acceptable correspondence or extension work, or by residence at another approved institution. In those instances in which the dean's office has granted such approval, thirty-three of the last *seventy* hours will have been completed at The University of Memphis.

5. TESTING AS A PREREQUISITE FOR GRADUATION

Any or all students may be required to take one or more tests designed to measure general education achievement and achievement in their major as a prerequisite to graduation, for the purpose of evaluation of academic programs. Unless otherwise provided for in any individual program, no minimum score or level of achievement is required for graduation. Participation in testing may be required for all students, for students in selected programs, and for students selected on a sample basis. Details concerning these regulations and the dates of the examinations will appear in the *Schedule of Classes* each semester.

6. FILING FOR GRADUATION

All students are required to file an intention to graduate during the semester preceding the semester of graduation. The deadlines for this filing are included in the academic calendars of the catalogs and the schedules of classes. It is the responsibility of the student to insure that this deadline is met.

REQUIREMENTS FOR TEACHER LICENSURE

An undergraduate student can be recommended for licensure to teach in Elementary Education (Grades 1-8); Early Childhood Education (Grades PreK-3); or Special Education (Grades K-12); or Physical Education (Grades K-12) in the State of Tennessee by completing all degree requirements for that endorsement as outlined for the Bachelor of Science in Education in the COLLEGE OF EDUCATION DEGREE PROGRAMS section of this catalog.

A student in any of these programs must (1) file an application for admission to the Teacher Education Program in The College of Education; (2) fulfill the requirements and application procedures for the Internship/Student Teaching Program; (3) file an intent to graduate application before the university deadline; (4) have an overall GPA of no less than 2.50 and a grade of C or above in each required professional education course; (5) take the Core Battery and the Specialty area (if required) of the National Teacher Examinations (NTE); and (6) fulfill all other graduation requirements listed under the TEACHER EDUCATION PROGRAMS: REQUIREMENTS section.

Students entering the university for the first time as freshmen who wish to prepare for teaching careers in fields other than Elementary Education, Early Childhood Education, Special Education, or Physical Education should see the academic advisor in the College of Education, Room 204.

Graduate, special, and transfer students who wish to obtain a teacher's license should confer with the academic advisor in the College of Education, Room 204, concerning their individual requirements.

CATALOG APPLICABILITY

DEGREE/MAJOR

A student may complete the requirements for the initial degree under the provisions of any *valid* U of M catalog provided the effective date of that catalog is not earlier than the student's initial admission to U of M or some other accredited institution of higher learning. The degree requirements published in the *Undergraduate Catalog* issue of The University of Memphis *Bulletin* are valid for seven years from the beginning of the academic year to which the catalog applies. For students whose initial enrollment occurs Fall 1997-Summer 1998, this catalog is valid through Summer 2004; for those whose enrollment occurs Fall 1998-Summer 1999, the validity period ends Summer 2005.

With the approval of the dean of the college through which the student's degree is offered, any student who had completed at least fifteen semester hours of course work and whose progress was interrupted by a call to active military duty may extend the validity date for graduation for any catalog valid at the time of the call to active duty. Though the student should attempt to complete requirements within the normal seven-year validity period, the dean may grant an extension commensurate with actual time served on active military duty and time required for directly related medical treatment that prevents the student's re-enrollment. Qualification for this extension is contingent upon re-enrollment within a period of time deemed reasonable by the dean. The extension is not allowed for a full military career.

MINOR

The seven-year catalog validity period applies *only* to degree requirements as specified in *Graduation from the University* and *Colleges, Degree Programs and Courses* sections of the catalog. It does not apply to regulations in the *Academic Regulations* section. Specific regulations apply for the year in which they appear in the catalog.

Selection of a minor may be made from a valid catalog other than the one used for degree requirements unless the minor is restricted to a particular degree. Unrestricted minors may be selected from the same catalog as that used for degree requirements or from any *subsequent* catalog. Unrestricted minors approved too late for inclusion in the current bulletin may also be selected. In the case of both restricted and unrestricted minors, the GPA required for the minor is that of the

degree granting college in the catalog under which the student is graduating. Currently available minors are listed in the catalog index under *Minor*.

SECOND BACHELOR'S DEGREE

A student who completes the requirements for one bachelor's degree from The University of Memphis may receive a second bachelor's degree with a different title upon the completion of the curriculum prescribed in the current catalog or any other valid catalog approved by the appropriate degree-granting college. The two degrees may be conferred simultaneously or subsequently.

All students who hold a baccalaureate degree from an accredited institution of higher education, including The University of Memphis, may earn another bachelor's degree with a different title. Two options are available for satisfying requirements for the additional degree. In both options, students must meet university, college, and major/program requirements from the current University of Memphis catalog or any other valid catalog approved by the appropriate degree granting college.

Option 1: The student must satisfy all University of Memphis degree requirements for graduation, including all university-wide requirements such as general education requirements and computer literacy, all college requirements, and all program/major requirements. This option may appeal particularly to those students who earned their previous degrees sufficiently long ago that they wish to learn and demonstrate the currency of their skills in writing, mathematics, oral communication, synthesis, and integration, as well as their knowledge of subject areas outside of their major.

Option 2: In this option, the student's first degree will satisfy *University of Memphis* general education requirements. However, students who use this option must receive advising to make certain that they satisfy all *external* (State of Tennessee, Tennessee Board of Regents, etc.) requirements for a University of Memphis degree.

Students seeking a second bachelor's degree and who have earned their initial baccalaureate degree from another institution are subject to catalog regulations applicable to transfer students.

SECOND MAJOR

Two majors in the same degree may be pursued simultaneously or subsequently. If a student completes the requirements from a valid catalog for an additional major for a degree previously earned at The University of Memphis, that major may be posted on the student's record *if the student applies for the additional major through the appropriate dean's office*.

6. ADVISING AND DEGREE PLANNING

THE UNIVERSITY OF MEMPHIS
PHILOSOPHY AND GUIDELINES FOR ACADEMIC ADVISING

STATEMENT OF PHILOSOPHY

The University of Memphis is committed to quality academic advising that fosters student growth and development. The main elements of quality advising consist of promoting the understanding of the aims and purposes of higher education; providing information and resources about the university's programs, opportunities, and requirements; and assisting students in identifying their educational and career goals.

The academic advising process involves many segments of the university community including students, faculty members, professional advisors, counselors, administrative staff, and student peers. Advisors and advisees should seek to integrate the services and expertise of both academic and student affairs professionals.

Academic advising should occur in a friendly, helpful, and professional atmosphere that will be directed toward:

- providing mentoring opportunities between advisors and students;
- providing timely and accurate information about the university's policies and standards;
- appreciating the needs, goals, and aspirations of students;
- assisting students in the selection and scheduling of classes;
- guiding and encouraging students in a steady progression to degree completion.

One of the most important attributes of excellent academic advising is establishing a positive relationship in which an advisor—either a faculty member or professional staff member—helps students to select, plan, and complete their academic goals without unnecessary delay or expense. Both parties must be committed to and be responsible for the success of the academic advising process. Both parties must recognize that quality advising requires time and that their responsibilities may demand more than simply a once-a-semester conference.

To achieve the goal of providing quality advising to students, the following guidelines may be helpful in outlining the responsibilities of the student, the advisor, and various administrative units in the advising process.

GUIDELINES FOR UNDERGRADUATE ADVISING

1. Responsibilities of Students

a. Know the advisor. For information and assistance, contact the academic department or the Academic Counseling Unit.
b. Accept responsibility for academic choices.
c. Seek help from advisor when needed.
d. Know basic university, college, and departmental graduation requirements for chosen major or minor well enough to plan own progress toward degree completion.
e. Develop social, academic, and career goals and examine how these goals will affect lives.
f. Keep current on academic policies, procedures, and requirements by reviewing the current bulletin, schedule of classes, and degree plans.
g. Maintain personal copies of tentative degree plan, progress reports, general educational evaluations, and transfer credit evaluations until an official graduation application is processed. Take these materials to each advising conference.
h. Obtain prior approval from the dean of the college before taking a course at another institution to meet degree requirements. Consult with Applicant Services and obtain forms for use in securing the dean's approval.
i. See that necessary academic records from other universities are transferred to Applicant Services for evaluation in an expedient fashion.
j. Become familiar with the Career Counseling Center and other resources at The University of Memphis; discuss long range goals, career opportunities, and the selection of a major or minor with career counselors, faculty, academic advisor, and other resource people.

2. Responsibilities of the Professional and Faculty Advisor

a. Know those students whom he/she is responsible for advising and have access to an up-to-date record on each student.
b. Provide students with correct up-to-date academic information about university, college, and departmental graduation requirements for their selected degree program.
c. Compile information to assist students in becoming aware of their academic, educational and personal needs; be aware how these needs affect their educational and career goals.
d. Assist the student in the development of a course of study—including the selection of electives—that reflects the student's academic background, personal situation, and educational goals.
e. Provide the student with information about alternatives, limitations, program changes, and the consequences of academic decisions.
f. Serve in a mentoring role to foster the students' progress in their academic pursuits.
g. Post office hours for student access to the advisor and provide flexibility when possible.
h. Use as many campus and community resources as necessary to best advise the student.
i. Encourage students to review with their advisor progress toward degree completion to assure early detection of problems [e.g. GPA, course availability, bulletin applicability, etc.].

3. Responsibilities of the Academic Counseling Unit

a. Provide students with academic information concerning university program, policies, procedures, and services.
b. Provide assigned students with an academic orientation to the university, including advising in course selection, assisting in resolving difficulties related to adjusting to new academic demands and surroundings, and explaining academic policies and procedures.
c. Provide students with referral information and resources to help with academic or non-academic problems (i.e. concerning financial aid, applicant services, employment, personal and career counseling, educational support, testing, etc.).
d. Work closely with colleges and academic departments to keep abreast of degree requirements, course content, status and careers of students graduating in specific majors.

e. Work with students using an approach that incorporates a developmental advising philosophy—one that takes into account the holistic nature of the students and the problems they may be facing (academic, personal, career). Help students begin to deal with these issues by listening, counseling and providing basic information and referrals to appropriate resources within the Center for Student Development and the university.
f. Prepare undecided students to enter one of the degree granting colleges.
g. Assist students in the comprehension of academic requirements and their specific academic curriculum.

4. **Responsibilities of the Departments and Colleges**
The manner in which the various colleges and departments handle advising responsibilities will vary with regard to the special needs of students and programs.

a. Formulate and direct academic advising programs and provide training within their academic units to meet the students' needs.
b. Provide for the maintenance of individual student record files at the college and/or department level (e.g. test scores and transfer credit evaluations.)
c. Assign advisors within academic units and provide advisors and students with information about the advisement program, including whom students can see for academic advisement and the best times to contact advisors for appointments.
d. Provide advisors during registration periods.
e. Provide faculty advisors with accurate up-to-date information.

USING THE CATALOG FOR DEGREE PROGRAM PLANNING

Each student is responsible for fulfilling all of the requirements for the degree program being pursued and for following the procedures and regulations as stated in the *Catalog in effect when entering college.* The *Catalog* is valid for seven years. Students should keep a copy of the *Catalog* they enter under until they graduate. Assistance from an advisor is helpful in planning the program of studies and in selecting the specific courses to be taken for each semester.

The *Graduation from the University* section of the *Catalog* outlines the minimum **university level** degree requirements. Some colleges specify the exact manner in which the university level requirements must be met. In addition to these, the student must fulfill the **college level** requirements for the degree and the **major** requirements. If the admission and/or retention standards for a particular college or department differ from the university requirements, they will be listed in the college degree program description. If they do not, the university requirements apply. The guidelines below will be helpful in planning which program to follow.

(1) Read the *Catalog* to investigate what options are available;
(2) consult with an academic advisor in the Academic Counseling Unit and/or the colleges which offer majors which are of interest to you;
(3) talk with the departmental faculty in these areas of interest;
(4) take advantage of the counseling offerings of the Center for Student Development (Testing, Career Counseling, Academic Counseling, Personal/Psychological Counseling, and the Educational Support Program);
(5) become familiar with the *Academic Regulations* section of the *Catalog*; determine the grades which are needed to insure retention and graduation as well as honors classifications in the university and in individual programs;
(6) if you are undecided about a major area, begin your program of studies with those courses required for all degrees.

After a major has been chosen:

(1) Consult with your advisor to determine what procedures are necessary to declare a major;
(2) read the entire section of the Catalog which relates to the degree and major selected: note all degree requirements listed for the college such as the number of hours required within the college and outside the college and the number of upper division hours required; list all the general education courses required for the college or obtain a degree sheet from the college advisor; note the major requirements (when choices are allowed, be sure to consult with your major advisor);
(3) plan your coursework semester by semester; developmental courses and courses required to remove high school deficiencies must be taken during the first two years; try to complete all of your lower division courses (1000-2000) during your first two years; be sure to check for prerequisites before enrolling in any courses, especially upper division courses; take the courses in the proper sequence.
(4) if you change majors, it is essential that you process the change immediately through the advisor for the new major in order to receive appropriate advising and to be able to register (STRIPES).

To complete a 132 semester hour degree program in four years, you need to take 33 hours per year. The maximum allowed per semester (fall/spring) is 20.5 hours. Special permission must be received in order to carry more than 20.5 hours.

Provost's Advisory Council on Academic Advising

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Professor; Faculty Senate Representative, Department of English

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Jimmy Wiley
Coordinator, High School Deficiencies

Bob Yates
Assistant to the Associate Director-Admissions, Office of Admissions

7. COLLEGES, DEGREE PROGRAMS AND COURSES

The following section contains the specific requirements for completing each degree, major, minor, and certificate offered by the university. It is organized by college and department. The courses offered by each college follow the degree program requirements of that college. There is a statement concerning how to use the catalog for degree program planning located with the Academic Calendar at the beginning of the catalog. *Students are urged to consult with an advisor for assistance in planning their degree programs and selecting appropriate courses.*

Explanation of course description format: The official course title appears in boldface type following the course number. The figures in parentheses after the course title denote the number of semester hours of credit for that course. If the credit is variable, to be determined by the department, that fact is indicated by the minimum and maximum credit, as BIOL 4000 (2-4).

If the phrase "Same as . . ." and another course number appear in parentheses following the credit hours, the course is cross listed with a course in another department and when offered by both departments may be taken through either. If another course number in parenthesis follows the credit hours, it is the former number for the same course. Credit may not be received for both the former number and the current number of the same course.

For those courses including regular laboratory hours, the lecture/laboratory hour distribution is written in italics near the end of the course description. At the end of many course descriptions, prerequisites and/or corequisites are listed. Students are responsible for meeting the stated prerequisites prior to enrolling for the course.

A **[G]** at the end of the course description indicates that the course may be used to fulfill university general education requirements. *These requirements vary somewhat according to the particular degree program or major.* Similarly, a **[W]** indicates a course approved as writing intensive for some programs, a **[C]** indicates a computation intensive course, and an **[I]** indicates an integrative course.

Courses are numbered according to the following system:

0001-0999 *Courses for which the credit does not apply toward minimum degree requirements or for which credit is restricted.*

1000-1999 *Courses primarily for freshmen*
2000-2999 *Courses primarily for sophomores*
3000-3999 *Courses primarily for juniors*
4000-4999 *Courses primarily for seniors and for which graduate credit is not offered.* (There is sometimes a corresponding 6000 number for which graduate credit is offered to graduate students who fulfill the additional requirements for such credit.)

1000-2000 level courses are lower division courses, 3000-4000 level courses are upper division courses. Course numbers have no reference to the semester in which the courses are taught.

The Schedule of Classes is published a few weeks before priority registration for each semester and the Summer Session. It contains a listing of the specific courses to be offered, with the time, place and instructor in charge of each section. It also contains special announcements concerning registration procedures and courses which may have been added since the publication of the catalog. Copies are available outside the Registration Services Office, room 167 in the Administration Building.

ELEMENTS OF COURSE DESCRIPTION

[1]**4002-**[2]**6002.** [3]**Museum Operation.** [4]**(3).** [5]**(3050).** [6]**(Same as ANTH 4002).** [7]Basic aspects of museum organization, management, exhibit planning and execution, and maintenance of collections and records. [8]*Two lecture/two laboratory hours per week.* [9]**(F).** [10]PREREQUISITE: ART 3090. [11]COREQUISITE: ART 4001. [12](S/U). [13]**[G]**

1 Course number/level
2 6000 level cognate
3 Course title
4 Credit hours
5 Former course number
6 Cross listing
7 Course description
8 Lecture/laboratory description
9 Semester in which course usually offered:
(F) = Fall, **(Sp)** = Spring, **(Su)** = Summer
10 Prerequisite
11 Corequisite
12 Special Grading
13 General Education*

* **[G]** = General Education; **[C]** = Computation Intensive; **[W]** = Writing Intensive; **[I]** = Integrative

The College of Arts and Sciences

RALPH J. FAUDREE, Ph.D., *Dean*
Room 219, Mitchell Hall

ACADEMIC PROGRAMS

Individual program requirements described in the *Undergraduate Issue of the 1997-1999 Bulletin of The University of Memphis* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this Bulletin; or consult the undergraduate bulletin website at: http://www.memphis.edu for the latest catalog updates.

Department	Major	Concentration Within Major	Degree Offered
Anthropology	Anthropology		Bachelor of Arts (B.A.)
Biology	Biology		Bachelor of Science (B.S.)
Chemistry	Chemistry		Bachelor of Science (B.S.) Bachelor of Science in Chemistry (B.S.Ch.)
Criminology and Criminal Justice	Criminology and Criminal Justice		Bachelor of Arts (B.A.)
Economics	Economics		Bachelor of Arts (B.A.)
English	English	(1) Literature (2) Creative Writing (3) Professional Writing (4) Language and Linguistics (5) English as a Second Language	Bachelor of Arts (B.A.)
Foreign Languages and Literatures	Foreign Languages *(With single language concentration from the first five or multiple language concentration from total list)*	(1) French (2) German (3) *Russian (4) Spanish (5) Latin (6) Greek	Bachelor of Arts (B.A.)
Geography and Planning	Geography	(1) Geographic Techniques (2) Environmental and Earth Science (3) Geography (4) Urban Planning	Bachelor of Arts (B.A.) Bachelor of Science (B.S.)
Geological Sciences	Geological Sciences	(1) Geology (2) Geophysics	Bachelor of Science (B.S.)
History	History		Bachelor of Arts (B.A.)
Mathematical Sciences	Mathematical Sciences	(1) Mathematics (2) Statistics	Bachelor of Science (B.S.)
	Computer Science		Bachelor of Science (B.S.)
Microbiology and Molecular Cell Sciences	A new major is pending TBR review. Should it be approved in time, Fall 1998 will be the implementation and catalog validity date. ***Check with departmental advisor after 9/97.***		
Philosophy	Philosophy		Bachelor of Arts (B.A.)
Physics	Physics		Bachelor of Science (B.S.)
Political Science	Political Science		Bachelor of Arts (B.A.)
Psychology	Psychology		Bachelor of Arts (B.A.) Bachelor of Science (B.S.)
Sociology and Social Work	Sociology		Bachelor of Arts (B.A.)
	Social Work		Bachelor of Arts (B.A.)
Interdepartmental Programs	International Studies	(1) American Foreign Policy (2) Western Europe (3) Latin America (4) Asia (5) Russia and Eastern Europe (6) Africa and the Middle East	Bachelor of Arts (B.A.)

*A concentration in Russian requires a collateral foreign language concentration or a collateral major outside the Department of Foreign Languages and Literatures.

PURPOSES

The College of Arts and Sciences has three distinct functions within the framework of the university.

1) Its primary function is to offer a strong liberal arts program designed to help the students prepare themselves for life in their own cultural setting by acquiring the means and desire to continue the processes of intellectual development and character formation throughout their lives. "The purpose of education," wrote John Stuart Mill, "is to make capable and cultivated human beings." "Education has for its object the formation of character," wrote Herbert Spencer. We believe that people are people, no matter what their careers, and that if we can help people to become more capable and sensible, they will have better careers and lives. It is our belief that the best preparation for any profession or vocation is a thorough foundation in those major fields of human interest, which are included in the humanities, the natural sciences, and the social sciences. A program of liberal studies at The University of Memphis aims to provide the students with a store of factual knowledge, to introduce them to varying sets of principles, to stimulate them to think about and evaluate facts and principles, and to encourage them to order their own affairs and those of their society with the talent, insight, and discrimination they develop.

2) The College of Arts and Sciences offers this kind of education to the candidates for its own degrees, and to the students of other colleges of the university, all of whose degree plans call for courses in the arts and sciences.

3) The college offers preparatory courses for students interested in careers in medicine, dentistry, nursing, teaching, law and other professions; specific preprofessional programs, designed to prepare students to qualify for admission to professional schools, are available.

ORGANIZATION OF THE COLLEGE

Departments

The College of Arts and Sciences comprises nineteen departments: Anthropology, Biology, Chemistry, Criminology and Criminal Justice, English, Foreign Languages and Literatures, Geography and Planning, Geological Sciences, History, Mathematical Sciences, Microbiology and Molecular Cell Sciences, Philosophy, Physics, Political Science, Psychology, Sociology and Social Work; Aerospace Studies, Military Science, and Naval Science. Requirements for the majors and minors offered by these departments are listed in this section under *Departmental Requirements for Majors and Minors.*

CONCENTRATION GROUPS

The various offerings of the nineteen departments of The College of Arts and Sciences are organized into four concentration groups:

HUMANITIES: English, French, German, Greek, history, Italian, Latin, mathematics, philosophy, psychology, Russian, Spanish.

NATURAL SCIENCES: biology, chemistry, geology, physical geography, mathematics, physics.

SOCIAL SCIENCES: anthropology, criminal justice, economics, geography (other than physical), history, philosophy, political science, psychology, sociology.

ROTC PROGRAMS: Aerospace Studies, Military Science, Naval Science.

RESIDENCE REQUIREMENTS

University residence requirements are explained in detail in the *Graduation from the University* section. A transfer student in The College of Arts and Sciences must earn at least 6 semester hours in residence in the major subject and at least 3 semester hours in the minor. These credits may be earned only through regular class enrollment for a letter grade.

PRE-PROFESSIONAL TRAINING

Standing committees of the faculty are available to advise students interested in preparing for careers in various professional areas. Committee members representing departments of the university in which pre-professional training is given advise students concerning specific programs required by the various professional schools.

Pre-Medical—The Health Science Professions Advisory Office, located in the Dean's Office, offers advising and career information to students planning on applying to the following health-professional schools: medicine, dentistry, pharmacy, optometry, veterinary medicine, and allied health fields including cytotechnology, dental hygiene, health information management, medical technology, occupational therapy and physical therapy.

Pre-Law—in general, accredited law schools have not adopted specific requirements for pre-law education; they do, however, emphasize certain courses as being conducive to the development of the broad cultural background necessary for the successful study of law. Students enrolling in The College of Arts and Sciences and interested in applying to law school should see the Pre-Law Advisor for further information.

Teacher Preparation—Students who wish to prepare for teaching careers in the secondary schools of Tennessee will be expected to complete a baccalaureate degree with a major in the intended teaching area, followed by earning a Master of Arts in Teaching degree program through the College of Education. Additional information on licensure requirements may be obtained from the dean's office in Arts and Sciences or the Office of Teacher Education in the College of Education.

DEGREE REQUIREMENTS

Degrees Offered

The College of Arts and Sciences offers three degrees: the Bachelor of Arts, the Bachelor of Science, and the Bachelor of Science in Chemistry.

Foreign Language Requirements

The foreign language requirement for all degrees offered through the College of Arts and Sciences is as follows:

Two courses in a single foreign language at or above the 2000 level. Beginning in the Fall of 1990, all students who have not successfully completed first year language courses at an accredited institution of higher education and who wish to enroll in 2201 (Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Latin, Russian, Spanish) will be required to take the placement test given by the Department of Foreign Languages and Literatures. Students presenting a language to meet university admission requirements cannot receive credit for 1101 in that language.

For information about the dates and place of placement tests, contact the Department of Foreign Languages and Literatures.

A student already having proficiency in a foreign language taught at The University of Memphis should enroll in a course at the level for which the student is qualified. This course can best be determined by taking the placement test given at the beginning of each semester. (Detailed information is available from the chair of the Department of Foreign Languages and Literatures.) No credit is granted on the basis of the placement test. However, students whose first college-level language course is 2201 or higher and who pass this course with a grade of C or better may apply for Credit by Course Placement. The applicable fees are listed in the *Miscellaneous Fees* of the catalog. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures (application forms are available from the department). This regulation shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see *Credit by Course Placement* in Section 5 of this catalog.

Once a student begins with a lower division course, credit in all remaining higher-numbered courses in the lower division must be earned in sequence, without skipping. For example, students who begin with LATN 1101 cannot skip LATN 1102 and enroll in LATN 2201.

This regulation will also apply to a student whose mother tongue is not English, with the following modifications: lower division credit in the native language will be given when the student has successfully completed the English composition requirement for graduation (see *Graduation from the University,* for details) and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make *written application to the chair of the Department of Foreign Languages and Literatures.*

Bachelor of Arts

To qualify for the Bachelor of Arts degree the student must complete a minimum of 132 semester hours with a grade point average of 2.0. Of the 132 semester hours required, no more than 42 semester hours in any one subject will be counted toward a degree. At least 42 semester hours must be in courses from the upper division. Detailed requirements are as follows:

GENERAL EDUCATION AND B.A. DEGREE

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication (3 hours): COMM 2381.

Foreign Language (6 hours): Two courses in a single foreign language at or above the 2000 level.

Mathematics (6-10 hours): MATH 1181 and 1182, or MATH 2000, or 1312, or 1321; plus one additional course chosen from any MATH course numbered 1211 or higher (except MATH 1601) or PHIL 1611.

Literary Heritage (6 hours): ENGL 2201 or 2202 plus one course chosen from: CLAS 3412, 3413, 3414; ENGL 3100-09, 3210, 3211, 3212, 3213, 3214, 3220, 3221, 3222, 3224, 3321, 3322, 3323, 3411, 3412, 4231, 4232, 4233, 4234, 4241, 4242, 4251, 4252, 4321, 4322, 4323, 4341, 4342, 4371, 4423, 4424, 4441, 4451, 4461; FREN 3411, 4412; GERM 3411, 3412, 4443, 4451, 4465; GREK 3111, 3511, 3911, 4441; LALI 4010, 4493; LATN 3111, 3211, 3912, 4411, 4711; RUSS 3441, 3442, 3443; SPAN 4410, 4431, 4432, 4510, 4561, 4562; THEA 4582.

Fine Arts Heritage (6 hours—must select two different disciplines): One course from: ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551; plus one course from the previous list or from: ART 2101, THEA 4551, 4552; DANC 3101, MUHL 4800.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881; POLS 4212, POLS 4405; SOCI 3422.

Social Science (12 hours): One course from list A, one course from list A or list B, and two courses from lists A, B, or C (no more than 6 hours from any one discipline):

A: ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/CSED 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

C: COMM 1780; CJUS 3510; GEOG 3430, 4304, 4313, 4324, 4431, HIST 4871; JOUR 1700; POLS 3213, 3216, 3506; PSYC 1102, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923.

Natural Science (11-12 hours): One sequence from list A plus one course in a different science chosen from list A or list B: NOTE: *If a course has a lab, the lab must be taken to complete this requirement.*

A: BIOL 1071, 1072, 1081, 1082; BIOL 1151, 1152, 1161, 1162; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1001, 1011, 1002, 1022; GEOL 1101, 1103; PHYS 1001, 1010, 1002, 1020; PHYS 2003, 2510, 2004, 2520; UNIV 1610, 1611.

B: GEOG 1003, 3221, 4201, 4211, 4231, 4241; PHYS 2001, 2110; PSYC 3306 (if sequence is not biology).

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121). NOTE: *The College of Arts and Sciences accepts a maximum of two semester hours in physical activity courses toward the fulfillment of its degree requirements.*

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the university-approved computer literacy examination.

MAJOR

Completion of requirements for a major in one of the following disciplines: anthropology, criminology and criminal justice, economics, English, foreign languages, geography, history, philosophy, political science, psychology, sociology, social work, or international relations.

ELECTIVES

To bring the total to 132 semester hours.

Bachelor of Science

The Bachelor of Science degree may be awarded only to students majoring in one of the following disciplines: biology, chemistry, computer science, geography, geological sciences, mathematical sciences, physics, or psychology. Students majoring in geography or psychology (for the Bachelor of Science degree) must minor in either biology, chemistry, computer science, geological sciences, mathematical sciences, or physics. The minor requirement does not apply to geography majors in the Environmental and Earth Science Concentration who opt to take 24 credit hours in natural sciences, 8 hours from each of the following: biological sciences, chemistry and physics.

To qualify for the degree of Bachelor of Science, the student must complete a minimum of 132 semester hours with a grade point average of 2.0. Of the 132 semester hours required, no more than 42 semester hours in any one subject will be counted toward a degree. At least 42 semester hours must be in courses from the upper division.

Detailed requirements are as follows:

GENERAL EDUCATION AND B.S. DEGREE

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication (3 hours): COMM 2381.

Foreign Language (6 hours): Two courses in a single foreign language at or above the 2000 level.

Mathematics (6-8 hours): MATH 1312 or 1321, plus one additional course chosen from any MATH course numbered 1211 or higher (except MATH 1601), or PHIL 1611

Literary Heritage (6 hours): ENGL 2201 or 2202 plus one course chosen from: CLAS 3412, 3413, 3414; ENGL 3100-09, 3210, 3211, 3212, 3213, 3214, 3220, 3221, 3222, 3224, 3321, 3322, 3323, 3411, 3412, 4231, 4232, 4233, 4234, 4241, 4242, 4251, 4252, 4321, 4322, 4323, 4341, 4342, 4371, 4423, 4424, 4441, 4451, 4461; FREN 3411, 4412; GERM 3411, 3412, 4443, 4451, 4465; GREK 3111, 3511, 3911, 4441, LALI 4010, 4493; LATN 3111, 3211, 3912, 4411, 4711; RUSS 3441, 3442, 3443; SPAN 4410, 4431, 4432, 4510, 4561, 4562; THEA 4582.

Fine Arts Heritage (6 hours): One course from: ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551; plus one course in a different discipline from the previous list or from ART 2101, THEA 4551/THEA 4552, DANC 3101, MUHL 4800.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481; HIST 1301; PHIL 1101; POLS 1101; UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405; SOCI 3422.

Social Science (9 hours): One course from list A, one course from list A or list B, and one course from lists A, B, or C (no more than 6 hours from any one discipline):

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/ CSED 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111

C: COMM 1780; CJUS 3510; GEOG 3430, 4304, 4313, 4324, 4431: HIST 4871; JOUR 1700; POLS 3213, 3216, 3506; PSYC 1102; SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923.

Human Studies (3 hours): One upper division course from outside the major, chosen from the following disciplines: anthropology, art, communications, criminal justice, economics, geography (excluding those classified as natural science below), history, journalism, literature, music, philosophy, political science, psychology, sociology, theatre.

Natural Science (11-12 hours): One of the following sequences outside the major: BIOL 1071, 1072, 1081, 1082; BIOL 1151, 1152, 1161, 1162; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1001, 1011, 1002, 1022, GEOL 1101, 1103; PHYS 1001, 1010, 1002, 1020; PHYS 2003, 2510, 2004, 2520; UNIV 1610, 1611; plus one course from a different science, chosen from biology, chemistry; GEOG 1003, 3221, 4201, 4211, 4231, 4241; geological sciences; physics; PSYC 3306 (if sequence above is not biology). NOTE: *If a course has a lab, the lab must be taken to complete this requirement.*

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000.

Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121) NOTE: *The College of Arts and Sciences accepts a maximum of two semester hours in physical activity courses toward the fulfillment of its degree requirements.*

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:**

Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the university-approved computer literacy examination.

MAJOR

Completion of requirements for a major in one of the following disciplines: biology, chemistry, computer science, geography, geological sciences, mathematical sciences, physics, or psychology.

MINOR

Students majoring in geography or psychology (for a Bachelor of Science degree) must complete a minor in one of the following: biology, chemistry, computer science, geological sciences, mathematical sciences, or physics. The minor requirement does not apply to geography majors in the Environmental and Earth Science Concentration who opt to take 24 credit hours in natural sciences. 8 hours from each of the following: biology, chemistry and physics.

ELECTIVES

To bring the total to 132 semester hours.

Bachelor of Science in Chemistry

To qualify for the Bachelor of Science in Chemistry degree, the student must complete a minimum of 132 semester hours with a grade point average of 2.0. Of the 132 semester hours required for graduation, at least 42 semester hours must be in courses from the upper division. Detailed requirements are as follows:

English Composition (6 hours): ENGL 1101, 1102 with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Foreign Language (6 hours): Two courses In a single foreign language at or above the 2000 level.

Mathematics (12 hours): MATH 1321, 2321, 2322.

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282; GEOG 3401; HIST 2601, 2602, 3863, 3900, 4851, 4881; POLS 4212, 4405; SOCI 3422.

Social Science (6 hours): Select one course from list A and one from list A or **B**:

A: (Global Perspective): ANTH 1200; CJUS 2110; ECON 2110; GEOG 1301, 1401; POLS 2301, 2501; PSYC 2201; SOCI 2100, SOCI 2101/CSED 2101; UNIV 2304.

B: ANTH 1100. CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (Included in the Chemistry and Physics requirements)

Chemistry (43 hours): CHEM 1131, 1121, 1132, 1122; 3201, 3211, 3301, 3302, 3311, 3312, 3402, 3411, 3412, 4101, 4111, 4604, 4911; three semester hours in 4991, 4992, or 4993, and four additional hours in senior chemistry courses. No more than three hours of research (CHEM 4991, 4992, 4993) may be counted toward the chemistry requirements.

Physics (8 hours): PHYS 2003, 2510, 2004, 2520; or 2001, 2110, 2002, 2120 (by permission)

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121) NOTE: *The College of Arts and Sciences accepts a maximum of two semester hours in physical activity courses toward the fulfillment of its degree requirements.*

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement. CHEM 3201-3211 may be counted.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement. CHEM 4993 may be counted.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the university-approved computer literacy examination.

COURSES NOT APPLICABLE TOWARD B.A., B.S., AND B.S.Ch. DEGREES

CHEM 1100 and MATH 0990 may not be used to fulfill the 132-hour minimum required for degrees offered through The College of Arts and Sciences.

DEPARTMENTAL REQUIREMENTS FOR MAJORS AND MINORS

Listed below are the specific course requirements for all majors and minors offered in The College of Arts and Sciences. *A minimum grade of C is required in every course applicable toward a major or minor* (including corequisites), except in beginning courses and in sophomore English.

Every student should be aware that the mere completion of courses outlined below with a grade of C or better does not guarantee classification as a major or minor in the discipline concerned; *the student must be recommended by the chair of the department in which the major or minor is sought.* If, in the opinion of the chair, the quality of the student's work is not high enough, additional work, the repetition of courses, or other evidences of acceptable scholarship may be required.

ANTHROPOLOGY

The Major: 30 semester hours in anthropology courses including ANTH 1100, 1200, 3200, 4065; and 18 additional semester hours, at least 6 of which must be at the 4000 level.

The Minor: 18 semester hours in anthropology courses including ANTH 1100, 1200, 3200, and 4065.

Honors Program.

The Department of Anthropology offers an honors program in anthropology to the superior anthropology student who desires a more intensive approach to and knowledge of the discipline, a deeper understanding of research skills, and an opportunity for original criticism and analysis. To be eligible a student must (a) have the approval of the Departmental Honors Committee, (b) be an anthropology major, (c) have attained at least junior standing, (d) have completed successfully ANTH 1100, 1200, and one upper-division anthropology course, (e) maintained a cumulative grade point average of at least 3.00 in overall studies, (f) maintained a cumulative grade point average of at least 3.25 in anthropology, (g) completion of four honors courses in anthropology (at least one of which must be an independent study culminating in a research paper/thesis or research report) and a minimum of six hours in honors courses outside anthropology. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred, "With Honors in Anthropology." Moreover the student's diploma and the record at The University of Memphis will reflect this accomplishment. Details of the program are available at the Department of Anthropology office.

BIOLOGY

Students must earn a grade of at least C in all biological science (BIOL and MMCS) courses applied toward the major, the minor and in all required chemistry courses. Students must complete BIOL 1151, 1152, 1161 and 1162, before enrolling in any upper division course except BIOL 3170.

The Major: (52 hours) 36 hours in biological science courses and 16 hours in chemistry courses as outlined: BIOL 1151, 1152, 1161, 1162, 3050, 3072, 3073; one of BIOL 3030, 3230 or 3730; one of MMCS 3130 or 3500; 13 additional upper division hours in biological science courses approved by the department; and CHEM 1121, 1122, 1131, 1132, 3301, 3302, 3311, and 3312.

The Minor: 18 semester hours in biology courses including BIOL 1151, 1152, 1161, 1162 and 10 upper division hours.

CHEMISTRY

(The requirements listed below are for majors and minors for the Bachelor of Arts or Bachelor of Science degrees; for detailed requirements for the Bachelor of Science in Chemistry, a professional degree, see degree requirements described earlier in this section.)

CHEMISTRY

NOTE: Students must complete CHEM 1121, 1122, 1131, 1132 before enrolling in any upper division course applied toward the major or the minor.

The Major (50-52 hours): 32 hours in chemistry courses, 10-12 hours in mathematics courses. and 8 hours in physics courses as outlined below: CHEM 1121, 1122, 1131, 1132, 3201 **[C]**, 3211, 3301, 3302, 3311, 3312, and sufficient additional upper division semester hours. No more than three credit hours of research (CHEM 4991, 4992, 4993 **[W]**) may be counted toward the chemistry requirements.

MATH 1321, and two of the following courses: MATH 2321, 2322, 4611, COMP 4001.

PHYS 2003/2510, 2004/2520 (or 2001/2110, 2002/2120 if approved by the chair of the Department of Chemistry).

The Minor: 20 semester hours in chemistry courses, including CHEM 1121, 1122, 1131, 1132, 3301, 3302, 3311, 3312, and four upper division semester hours.

Honors Program: The department collaborates with the University Honors Program, where majors may earn *Interdisciplinary Liberal Arts Honors with an Emphasis in Chemistry.* Work in the major consists of a special project and a discipline based Honors thesis. For additional requirements and more information on Interdisciplinary Liberal Arts Honors, see the description under the University Honors Program entry in the *Independent Programs* section of this catalog.

COMPUTER SCIENCE

The Major: 58 to 60 semester hours consisting of MATH 1321, 2321, 2701, 3242 **[C]**, 4614; COMP 1900 (4), 2150, 3160, 3410, 4030, 4040 **[W]**,

4601, 4270 and an elective sequence that is a coherent package of 17-19 hours of computer-oriented courses designed by the student and the faculty advisor and approved by the Computer Science faculty. PHYS 2003/2510, 2004/2520 are required for the natural science requirement sequence, and ECON 2120 is strongly recommended as part of the social science requirement for the B.S degree. This major is offered through the Department a Mathematical Sciences.

The Minor: 22 semester hours in computer science courses, including COMP 1900 (4), 2150, 3410, 4030 and 9 additional upper division semester hours.

CRIMINOLOGY AND CRIMINAL JUSTICE

The Major: 36 semester hours of criminology and criminal justice including CJUS 1100, 3129 **[C]**, 3130, 3510, 3521, 3541 and 4110 **[I, W]**, plus either (1) 15 additional upper division hours in criminology and criminal justice, or (2) 12 additional upper division hours in criminology and criminal justice and 2110 as approved by the departmental advisor.

The Minor: 18 hours in criminal justice courses including CJUS 1100, 3521, 3541, and 3510.

Honors Program:

The department collaborates with the University Honors Program, in which majors may earn *Interdisciplinary Liberal Arts Honors with an Emphasis in Criminology and Criminal Justice Work* in the major consists of a special project and a discipline-based Honors thesis. For additional requirements and more information on Interdisciplinary Liberal Arts Honors, see the description under the University Honors Program entry in the *Independent Programs* section of this catalog.

ECONOMICS

The Major: 30 semester hours, including ECON 2110 2120, 3310, 3320, 4920, and 15 additional upper division semester hours in economics courses as approved by the department advisor.

The Minor: 18 semester hours in economics courses including ECON 2110, 2120, and twelve additional upper division hours as approved by the department advisor.

The Department of Economics is located in the Fogelman College of Business and Economics.

Honors Program:

All students who receive a grade of B or better in ECON 2110 or 2120 honors sections are eligible for the honors program. Entry to the program can also be obtained through the recommendation of a member of the faculty to the Economics Departmental Honors Committee. A student must maintain an average grade of at least 3.25 in economics to continue in the program and must have an average grade of 3.5 or better in economics to graduate with honors in economics

Honor students take special courses during the junior and senior years, particularly the honors sections of ECON 3310 and 3320, and write a senior research paper. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Economics". Moreover the student's diploma and the record at The University of Memphis will reflect this accomplishment. Details of the program are available in the Economics Department office.

ENGLISH

The Major: 36 semester hours in English courses (chosen with approval of departmental advisor), including ENGL 1101, 1102; 2201 or 2202, 3210, 3220, and 3321; one course from ENGL 3501, 3511, 3701, 4501, 4604, 4605; and completion of the requirements in one of the following concentrations:

Literature: 12 semester hours in courses chosen from ENGL 3100-3323, 3701, 4001-4461; 4511 or 4711; 4900 (only in literature); and 3 upper division elective hours in English courses.

Creative Writing: 12 semester hours in courses chosen from ENGL 3605, 4601, 4603, 4604, 4605, 4900 (only in writing); and 3 upper division elective hours in English courses.

Professional Writing: 12 semester hours in courses chosen from ENGL 3601, 3602, 3604, 4100-09 (only topics in professional writing), 4602, 4606-4616, 4630, 4900 (only in writing); and 3 upper division elective hours in English courses.

Language and Linguistics: 12 semester hours in courses chosen from ENGL 3501, 3511, 3521, 4501-4521, 4540-4550, 4900 (only in language); and 3 upper division elective hours in English courses.

English As A Second Language: 12 semester hours in courses chosen from ENGL 4530, 4531, 4532, 4900 (only in ESL) and a maximum of 6 semester hours in courses listed under the Language and Linguistics concentration above; and 3 upper division elective hours in English courses.

NOTE: No more than a total of six (6) hours in ENGL 3100-09, ENGL 4100-09, and ENGL 4900 may be applied to the English major.

Students should see English advisors, who will explain the advantages of the various concentrations and assist students in developing an appropriate program.

The Minor: 12 upper division semester hours in English.

NOTE: Students who wish to satisfy the requirements for both the English major and the endorsement to teach English in high school should consult the College of Education for licensure requirements.

Students who intend to pursue graduate studies in English are strongly advised to elect courses that will ensure a comprehensive overview of the major figures and movements in British and American literature and of modern language theory.

Honors Program:

Honors sections of the required English courses on the freshman and sophomore levels (English 1101, 1102, 2201, 2202) are offered through the University Honors program and are open to qualified students regardless of their major. On the junior and senior level, the Department of English offers an honors track open only to English majors, who are eligible to apply for admission to the program if they have a grade point average of 3.25 in their overall studies and in English. Honors students take special courses during their junior and senior years and write a senior honors thesis. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in English." Moreover, the student's diploma and the record at The University of Memphis will reflect this distinction. Details of the program are available at the English Department office.

The department also cooperates with the University Honors Program, where majors may earn *Interdisciplinary Liberal Arts Honors* as described in the *Independent Programs* section of this catalog, in addition to Honors in English.

ENVIRONMENTAL STUDIES

ENVIRONMENTAL STUDIES MINOR

The Interdisciplinary Environmental Studies Minor Program is intended to provide all students with the opportunity to obtain a broad-based knowledge of the environmental issues facing our planet, knowledge that spans both the biological-physical threats and solutions as well as behavioral-social-economic implications. One core course (INTD 2100—*Introduction to Environmental Studies*) is required of all students.

The Minor: The student must pass INTD 2100 with a grade of "C" or better and complete 5 additional environmentally related courses (15-20 semester hours) from the two groups of courses listed below as approved by the university's Environmental Research, Issues, and Programs Committee (ERIPC). At least 2 courses must be selected from each group and 5 courses from 4 different departments.

GROUP 1: BIOLOGICAL-PHYSICAL EMPHASIS: BIOL 3050, 4002, 4055, 4060, 4100, MMCS 4450, CHEM 4001, CIVL 4143, 4144, GEOG 3221, 4201, 4211, 4231, GEOL 4342, PHYS 3410, INTD 4100-4110.

GROUP 2: SOCIO-BEHAVIORAL EMPHASIS: ANTH 4111, 4255, 4360, ECON 4260, HIST 4861, ICL 4601, PSYC 3501, 3502, SLS 3202,SOCI 4641, INTD 4120-4130.

NOTE: If a faculty member wishes for a course such as a Special Topics course to be included in the Interdisciplinary Environmental Minor in a given semester, then, with the approval of the ERIPC, the course may be offered within the instructor's department or as either INTD 4100-4110 or INTD 4120, whichever is appropriate. Students taking ERIPC-approved courses that do not appear in the catalog will be given a letter to present to their graduation analyst indicating that those courses have been approved. Information pertaining to the minor and other environmental initiatives may be obtained in 213 Mitchell Hall (901-678-2253).

FOREIGN LANGUAGES

The Major: Successful completion of one of the following concentrations: (1) A single-language concentration in French, German, Latin,*Russian or **Spanish: 24 upper division semester hours. (2) A two-language concentration chosen from French, German, Greek, Latin, Russian, and Spanish: 27 upper division semester hours with a minimum of 9 semester hours in each language. (3) A three-language concentration: All three language concentrations require prior consultation with the approval of the department chair. Plans will normally include at least 33 upper division semester hours to include at least 12 semester hours in each of two languages plus approved course work in a third language.

NOTE: Majors are encouraged to take *Literary Criticism,* LALI 4890, as an Integrative course.

NOTE: With the approval of the Head of the Classics Section, up to 6 credit hours in upper division Classics courses may be applied toward a concentration in Greek or Latin.

Foreign Language majors who minor in International Business are encouraged to include Advanced Composition and Conversation (6 hours) and two courses for commerce (6 hours) as part of their major.

The minor in International Business will have at least 18 semester hours within the Fogelman College of Business and Economics. Notice that the courses listed in the Business and Economics section are all upper division and require corresponding lower division courses. Therefore, a minor will include, normally, 9 hours from this list and another 9 hours of lower division courses taken as prerequisites. Please consult your advisor and the advisor of the International Business program regarding any matter concerning the curriculum program or graduation requirements.

The Minor: 18 semester hours from A and B, below:

A. Courses numbered 1102, 2201, and either 2202 or 2204 (or their equivalents) in the foreign language in which upper division hours are to be taken.

B. 9 upper division semester hours in one of the following languages: French, German, Italian, Latin, Greek, Russian, or Spanish.

* A concentration in Russian requires a collateral foreign language concentration or a collateral major outside the Department of Foreign Languages and Literatures.

** Students with a single-language concentration in Spanish must take SPAN 4410 and 4510.

GEOGRAPHY

The Major: 35 semester hours in geography courses including one course from each of the core subject areas for a total of 20 hours and completion of the requirements in one of the following areas of concentration:

Core Requirements:

a. Environmental and Earth Science: GEOG 1001, 1011, 1002 and 1022 (8)

b. Human: GEOG 1401 or 3430 (3)

c. Regional: GEOG 1301 or any 43—numbered course (3)

d. Geographic Techniques: GEOG 3514 (3)

e. GEOG 4801(3) **[I, W]**

Concentrations:

GEOGRAPHY: 15 semester hours of geography with a minimum of 12 upper division hours.

ENVIRONMENTAL AND EARTH SCIENCE: 15 semester hours of geography with a minimum of 12 upper division hours selected from GEOG 3221, 4111, 4122, 4131, 4201, 4211, 4231, 4241, 4251.

In lieu of a minor, students in this concentration may opt to take the following three science sequences (24 hours):

BIOL 1151, 1152, 1161, and 1162.

CHEM 1131, 1121, 1132, and 1122.

PHYS 2110, 2001, 2120, and 2002.

GEOGRAPHIC TECHNIQUES: 15 semester hours of geography with a minimum of 12 upper division hours selected from GEOG 3501, 4502, 4503, 4510, 4511, 4514, 4521, 4524, 4531.

URBAN PLANNING: a. *Required core* (9 semester hours): GEOG 3451, 4431, 4551; b. *Guided electives* (6 semester hours): two of the following: GEOG 3430, 4201, 4231, 4442, 4443, 4531, 4700.

The Minor: 20 semester hours in geography courses, at least 9 of which must be upper division hours.

Park Ranger Training

GEOG 4271 and 4272 compose an eight-month training program in park resource protection and visitor management that prepares students for seasonal employment as rangers in the National Park Service and state park service. The program is coordinated by the Department of Geography and Planning.

GEOLOGICAL SCIENCES

The Major: Students must complete GEOL 1101, 3311, 3312, 3512 **[C]**, and 4622 **[I]** and select either of the following concentrations:

GEOLOGY: GEOL 1103 (4), 3211 **[W]**, 3712, and additional upper division semester hours as approved by the advisor to a total of 36 semester hours; CHEM 1121/1131, 1122/1132; MATH 1321; PHYS 2001/2110, 2002/2120 or PHYS 2003/2510, 2004/2520.

GEOPHYSICS: GEOP 4101, 4201, 4401 and additional upper division semester hours to total 36 semester hours. MATH 1321, 2321, 2322, 3391; PHYS 2003/2510, 2004/2520.

The Minor: A minimum of 18 semester hours in geology courses, including GEOL 1102. Six of these hours must be selected from upper division courses.

HISTORY

The Major: 30 semester hours in history courses, including HIST 1301, 1302, 2601, 2602, and 18 additional upper division semester hours. Of the 18 upper division hours required for the major, a maximum of 12 may be taken in any one field (United States, Latin American, Ancient/Byzantine, European, Russian, Far Eastern, African).

The Minor: 21 semester hours in history courses, including HIST 1301, 1302, 2601, 2602, and 9 additional upper division semester hours.

Honors Program:

History majors who have attained junior standing, successfully completed six semester hours of lower division history, and maintained a grade point average of at least 3.25 in overall studies and in history courses taken, are eligible for admission to the honors program in history. Students admitted to the program must take 18 hours of honors work, at least 12 of which must be taken in upper division history courses after admission to the departmental program. These 12 hours must include HIST 4003 and 4996. Those who successfully complete the program and the regular B.A. requirements will have their degree conferred "With Honors in History." The student's diploma and the record at The University of Memphis will be similarly endorsed. A detailed description of the program, together with application forms for admission, may be obtained in the History Department office.

The department also collaborates with the University Honors Program, where history majors may earn *Interdisciplinary Liberal Arts Honors with an Emphasis in History.* For more information on Interdisciplinary Liberal Arts Honors, see the description under the University Honors Program entry in the *Independent Programs* section of this catalog.

INTERNATIONAL STUDIES

The International Studies program provides the opportunity to bring the knowledge of several traditional disciplines to bear upon a focal point of human relationships and problems that cross national and cultural boundaries. The program is designed to serve the student who seeks knowledge of the range of contemporary and possible future problems which confront international society and an understanding of alternative national and cultural perspectives on solutions to those problems. The program also serves the needs of students planning a career in the Foreign Service or related agencies of the federal government and students preparing for employment abroad in the private sector, or in international organizations, private or public.

International Studies is offered as a major only. The program emphasis is on the course work in history, political science, economics, and geography, with contributions from other social science disciplines and art. Within the program, the student is required to concentrate a part of the work in the field of American foreign policy or in one of five areas of the world. Students are encouraged to pursue the study of a foreign language and to seek opportunities for travel and study abroad. The student's program should be planned in consultation with the Coordinator of International Studies. Course requirements are listed below.

The Major: 33 semester hours, including ECON 4350; POLS 2501 and 4508; HIST 4260; INTL 4601; at least one course in International Political Processes (POLS 3505, 4501**[W]**, or 4504); at least one course in International Economic Processes (ECON 3580 or 4340, GEOG 3430, or POLS 4510): at least one course in International Development Processes (ANTH 3721, ECON 3580, or SOCI 2100 or 4641); and three courses, in at least two disciplines, from one of the following areas of concentration:

(a) *American Foreign Policy:* HIST 3803, 3811; POLS 2301, 3506, 3508, 4506.

(b) *Western Europe:* GEOG 4304; HIST 3302, 3506, 4145, 4461; POLS 3302.

(c) *Latin America:* ANTH 3232; ART 4162; GEOG 4324, 4325; HIST 3212; POLS 3306.

(d) *Asia:* GEOG 4306; HIST 3291, 4292, 4294, 4295; PHIL 3721; POLS 4307; SOCI 4642.

(e) *Russia and Eastern Europe*: GEOG 4305; HIST 4162; POLS 4305, 4502.

(f) *Africa and the Middle East:* ANTH 3242; HIST 3271, 4281, 4282, 4283; POLS 3304, 3309.

NOTE: The student electing the major in International Relations is advised to take the following courses to insure that he has an adequate background for the required courses in the major: ECON 2110; HIST 1301, 1302; INTL 1101, 1102.

LEGAL THOUGHT AND LIBERAL ARTS

INTERDISCIPLINARY MINOR

The minor, Legal Thought and Liberal Arts, is designed to provide an interdisciplinary liberal arts program for students who intend to enter the legal profession. The minor will be of particular benefit to pre-law students whose majors are more professional in nature and who are not exposed to the broader liberal arts curriculum. Students will be introduced to major intellectual traditions of the West and to ethical, social, and economic issues of significance to our time. The courses in the minor require that students read critically, think logically, and write clearly—attributes required of persons in the legal profession. Students wishing to minor in Legal Thought and Liberal Arts should contact the pre-law advisor in room 207 of Mitchell Hall.

The Minor: 18 semester hours of required courses and electives:

A. **Required Core Course:** PHIL 1611 and one of the following:

ENGL 3604, 4231, 4233, 4234.

B. **Electives:** Select one course from each of the following groups:

(1) Historical Context of the Law: HIST 3121, 3506, 3840.

(2) Economic Context of the Law: ECON 2110, 2120, 4130.

(3) Theoretical Foundations of Jurisprudence: PHIL 3511, 4551; POLS 3401, 3402, 3405.

(4) Practical Foundations of Jurisprudence: CJUS 3510; POLS 4212, 4405.

MATHEMATICAL SCIENCES

The Major: 41-42 semester hours, including 36 semester hours in MATH courses, including MATH 1321, 2321, 2322, 2701, and 3242 **[C]** (majors are encouraged to consider the departmental honors program described below); plus the following courses applicable to degree requirements: CHEM 1121, 1122, 1131, and 1132 or PHYS 2510, 2520 and 2003, 2004; and completion of one of the following two concentrations:

MATHEMATICS (21-22 hours): COMP 1900 or COMP 4001 and 18 semester hours of upper division courses (excluding MATH 4999) with departmental approval. The following are examples of approved course selections.

a. *Applied Mathematics:* MATH 3391, 4391, 4635, 4721, and six upper division hours from the following: MATH 3221, 4242, 4261, 4271, 4350 **[W]**, 4351, 4361, 4381, 4390, 4392, 4640, 4741.

b. *General Mathematics:* MATH 3391, 4350 **[W]**, 4261, 4635, and six upper division hours from the following: MATH 3221, 4242, 4271, 4351, 4361, 4381, 4391, 4411, 4636 **[W]**, 4711, 4741.

c. *Graduate Study in Mathematics:* MATH 4261, 4350 **[W]**, three courses from the list: MATH 4242, 4351, 4361, 4411, and one additional course from the following: MATH 3221, 4242, 4271, 4351, 4361, 4381, 4390, 4391, 4411, 4635, 4711, 4741.

d. *Teacher Licensure in secondary education:* MATH 3221, 3581, 4151, 4261, 4635, and either MATH 4636 **[W]** or 4637.

NOTE: All approved programs must differ from the statistics concentration by at least nine semester hours. Students are encouraged to work with their advisors to plan their programs.

STATISTICS (21 semester hours): COMP 4001, MATH 4635, 4636 **[W]**, 4637, 4640, and six upper division hours from the following: MATH 3391, 4242, 4261, 4271, 4350 **[W]**, 4351, 4361, 4381, 4390, 4391, 4721, 4741.

The Minor: A minimum of 18 semester hours, including MATH 1321 (4), 2321 (4), 2322 (or MATH 1401, 1402, 2401) (4), plus six additional upper division semester hours in MATH courses.

Honors Program: The Department of Mathematical Sciences offers an honors program in Mathematics and Statistics for the talented student. The student must satisfy the following course requirements with a minimum GPA of 3.50 in all MATH courses: The major with honors in Mathematical Sciences: 37 semester hours in MATH courses, including MATH 1401, 1402, 2401, 3402, 4402; plus the following courses applicable to the degree: CHEM 1121, 1122, 1131, 1132, or PHYS 2510, 2520, and 2003, 2004; and completion of one of the two areas of concentration described above.

Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degrees conferred *With Honors in Mathematical Sciences*. Moreover, the student's diploma and record at The University of Memphis will reflect this distinction.

PHILOSOPHY

The Major: 30 semester hours in philosophy courses including PHIL 1101 or 1102, 1611, 3001, 3002, 3411 or 3511 **[W]** and 15 additional upper division semester hours.

The Minor: 18 semester hours in philosophy courses, including PHIL 1101 or 1102, 1611, and 12 upper division semester hours. In consultation with the coordinator of undergraduate studies in philosophy, a student may design a minor (18 hours) that applies to the student's major area of study.

Honors Program:

This program is open to philosophy majors with a 3.0 overall average and a 3.5 average in philosophy. The student will complete, with a grade of B or better, a thesis submitted for credit in PHIL 4891. The thesis topic must be approved by the thesis director before the student registers for PHIL 4891.

Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Philosophy." Moreover, the student's diploma and record at The University of Memphis will reflect this distinction.

PHYSICS

The Major: (60 hours): 37 hours in physics courses, 8 hours in chemistry courses, and 15 hours in mathematics courses as outlined below: PHYS 2003, 2004, 2510, 2520 (PHYS 2001, 2002, 2110, 2120 are acceptable but not recommended), PHYS 3010, 3011, 3111, 3211, 3610, 3611, 4510, 4211, 4410, and six additional upper division hours of electives. CHEM 1121, 1122, 1131, 1132. MATH 1321, 2321, 2322, 3391, or equivalent courses.

The Minor: 20 semester hours in physics courses, including PHYS 2003, 2004, 2510, 2520 (PHYS 2001, 2002, 2110, 2120 are acceptable but not recommended), and twelve additional upper division hours.

POLITICAL SCIENCE

The Major: 36 semester hours in Political Science, including POLS 1100, 1101, 1102, 2301, 2501, 3100, and a minimum of 18 additional hours in upper division hours distributed across at least three of the following areas: American Government, Pre-Law/Public Law, Political Theory, Urban Politics, International Relations/Comparative Politics, and Research Methods. Only 9 semester hours of internship courses may be counted towards the 36 hour requirement.

NOTE: All majors are required to take one of the department's computational **[C]** courses to fulfill that requirement. Students who have taken a **[C]** Course prior to declaring Political Science major are exempted.

NOTE: The department offers Pre-Law advising for those interested in careers in law. Also, any major in Political Science may earn a second major in International Studies. Political Science courses in International Relations and Comparative Politics fulfill requirements for both the Political Science major and the Interdepartmental major in International Studies.

The Minors:

POLITICAL SCIENCE: 18 hours in Political Science courses, including POLS 1100, 1101 or 1102, or 2301 or 2501; and 12 additional semester hours, 9 of which must be in upper division courses. Only 6 semester hours of internship courses may be counted towards the 18 hour semester requirement.

PUBLIC ADMINISTRATION: 18 semester hours in Political Science courses including POLS 1100, 3601, **[W]**, and 12 semester hours to be selected from the following: POLS 3211, 3213, 4210, 4213, 4214, 4221, 4226, 4701, and 4702. Only 6 hours of internship courses may be counted toward the 18 hour requirement.

Honors Program:

The department offers an honors program to qualified majors who choose to pursue a more sophisticated knowledge of the discipline, a more rigorous level of analysis, and a deeper understanding of politics. Students who have completed 55 hours of course work (with at least 9 hours in Political Science) and have a minimum over-all grade point average of 3.0 (with a minimum in Political Science of 3.25), or who can present equivalent qualifications, are invited to apply for admission to the program. The program requires 18 hours of honors course work, 12 or more of which must be upper-division Political Science courses, and minimum final grade point averages of 3.00 overall, 3.25 in Political Science, and 3.25 in honors coursework. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degrees conferred "With Honors in Political Science". Moreover, the student's diploma and the record at The University of Memphis will reflect this distinction. Details of the program are available in the Political Science Office.

The department also collaborates with the University Honors Program, where majors may earn *Interdisciplinary Liberal Arts Honors with an Emphasis in Political Science.* Students may pursue this program instead of departmental honors or in addition to departmental honors. For more information on Interdisciplinary Liberal Arts Honors, see the description under the University Honors Program in the *Independent Programs* section of this catalog.

PSYCHOLOGY

The Major: 35 semester hours in psychology courses. including PSYC 1101, 1102, 3001 (4) **[C]**, 3002 (4) **[W]**, 4101 **[I]**; at least one course each from the 3100, 3300, and 3500 series; and 9 additional hours. In addition, all majors must take the Psychology Field Test during their senior year.

The Minor: 20 semester hours in psychology, including PSYC 1101, 1102, 3001 (or equivalent), 3002, and 6 additional hours.

Honors Program:

The Honors Psychology Program requires twelve to eighteen hours of Honors work in the major. Students who complete the program with a 3.25 cumulative grade point average will earn degrees that include the distinction "With Honors in Psychology." The program incorporates seminar style teaching and learning, interdisciplinary perspectives, collaborative faculty-student research, and an Honors thesis based on a significant research experience.

Entering freshmen are eligible to enroll in Honors Psychology 1101 and 1102 if they meet the admission criteria for the University Honors Program. Other students may enroll for Honors Psychology 1101 and 1102 if they have a 3.00 cumulative grade point average. Students who maintain a 3.25 cumulative grade point average are eligible for full participation in the Psychology Honors Program. Requirements for graduation "With Honors in Psychology" are described below:

(1) Introductory Psychology 1101 Honors and 1102 Honors are recommended for beginning students interested in the psychology major and who are eligible to participate in the University Honors Program. Students who enter the Honors Program having credit for Psychology 1101 and 1102 are exempt from this recommendation. (6 hours; recommended)

(2) Psyc 4032 Honors: Research Methodology (3 hours; required)

(3) PSYC 4302 Honors: Mind, Brain, and Intelligence (3 hours; required)

(4) One additional Honors course to be chosen from a) periodically offered Honors sections of courses in the psychology curriculum; b) Psyc 404x Honors Special Topics; or c) an individually selected course for which students design an Honors contract (3 hours; required)

(5) Psychology 4996: Honors: Senior Honors Thesis (3 hours; required)

Please see the department Honors Coordinator for more detailed information on the Honors Psychology Program. The department also cooperates with the University Honors Program, where psychology majors may earn *Interdisciplinary Liberal Arts Honors* as described elsewhere in this catalog. Some requirements for Honors in Psychology overlap with the Interdisciplinary Liberal Arts Honors Program.

SOCIOLOGY AND SOCIAL WORK

SOCIOLOGY

The Major: 30 semester hours in sociology, including SOCI 1111, 3311 [C], 3322, 4210 or 4211.

The Minor:

SOCIOLOGY: 18 semester hours in sociology, including SOCI 1111.

SOCIAL WORK

The main goal of the baccalaureate social work program is to prepare students for entry level generalist practice. A secondary goal is to provide a strong foundation for students who wish to pursue social work education at the graduate level. Social service and life experiences may not be substituted for any social work course. The social work program is accredited by the Council on Social Work Education.

The Major: 36 semester hours including SWRK 2910(4), 2911, 3902, 3903, 3904, 3906, 3920, 3930, 4830, 4831(4), 4840(2) **[I]**, 4841(2) **[I]**. BIOL 1071/1072, 1081/1082, ANTH 1200, and SOCI 3311 **[C]** are required.

The Minor: 19 semester hours in sociology and social work courses including SOCI 1111, SWRK 2910(4) and 2911, and 9 additional upper division hours in social work courses.

NOTE: Successful student progression requires each student to earn a grade of "C" or better in all required courses for the social work major. Students repeating two required classroom courses for the major or field instruction will have an academic review by division faculty in the term following the second course repetition. Although students may declare a social work major at any point in their matriculation, students should have a minimum of 40 hours completed including ENGL 2202, ANTH 1200, and two courses from the following list: SOCI 1111; PSYC 1101; POLS 1100; or ECON 2120 before entering the introductory social work courses, SWRK 2910 and SWRK 2911.

Arts and Sciences Course Descriptions

ANTHROPOLOGY

PROFESSOR
LINDA A. BENNETT, *Chair*
Room 314, Manning Hall
http://www.people.memphis.edu/~anthropology/

ANTHROPOLOGY (ANTH)

1100. Human Origins and Variation. (3). Biological basis for understanding of humans; fossil record and origins of humans, human society and culture; primate models and human behavior today; race and other human variation today. **[G]**.

1200. Cultural Anthropology. (3). Origin and development of human culture. Social relations, language, government, religion and ritual, and problems of developing nations or minority groups in modern world. **[G]**.

3035. Indians of the Mid-South. (3). Archaeology and ethnology of Southeast; intensive study of various Indian cultures of Tennessee and bordering states.

3111. Human Paleontology. (3). Hominid fossil record starting with primate developments; human evolution; human osteology.

3200. Peoples and Cultures of the World. (3). (Same as GEOG 3200). Major ethnographic areas and selected cultures of the world.

3225. Qualitative Methods of Field Research. (3). Various qualitative methods of anthropological research. Application in collecting life histories and writing ethnographic descriptions of contemporary societies. **[W]**

3231. Indians of North America. (3). Description and distribution of aboriginal culture types of North America north of Mexico; comparisons and interrelationships during pre- and post-contact periods.

3232. Peoples of Latin America. (3). Description and distribution of peoples and cultures of South America and Mesoamerica; comparisons and interrelationships during pre- and post-contact periods.

3242. Peoples of Africa. (3). Description and distribution of peoples and cultures of Africa; comparisons and inter-relationships during pre- and post-contact periods.

3272. Peoples of the South Pacific. (3). Description of peoples and cultures of Oceania (including Australia); comparisons and inter-relationships during pre- and post-contact periods.

3282. Cultural History of American Communities. (3). Cultural historic interpretation of formation, development and transformation of diverse community life-patterns in America; emphasis on analysis of community as it reflects change in settlement pat-

terns, kinship networks, political, religious, economic and value systems in American society. **[G]**

3300. The Ascent to Civilization. (3). (Same as HIST 3300). Interdisciplinary integrative examination of nature of civilization through investigation of origins of civilization and comparative study of world's earliest civilizations. PREREQUISITE: 9 hours of anthropology and/or history including either ANTH 1100 or HIST 1301. **[I]**

3332. Archaeology of Latin America. (3). Description and distribution of prehistoric cultural remains in South America and Mesoamerica, with emphasis on Mexico and Peru.

3342. Archaeology of Africa. (3). Description and distribution of archaeological remains in Africa; major regional sequences, extending from earliest evidences of human occupation until historic times. Emphasis on cultural achievements of pre-colonial Africa.

3351. Archaeology of Europe and Asia. (3). European and Asian cultures from first humans to early civilizations.

3511. Culture, Kin and Family. (3). Changing structure of family in Western and non-Western societies; cross-cultural approaches to mate selection, courtship rituals, kinship organization, institution of marriage, division of labor and authority in household, and childbearing; variation and flexibility in family structures as adaptive strategies for environmental, social and cultural change.

3711. Culture and Technology. (3). Anthropological survey of development of technology and its impact on organization of industry and work from prehistoric through post-industrial societies. Consideration of such current issues as public control of technology, labor market segmentation, and quality of working life, in context of comparative analysis of both pre-industrial and industrial societies.

3721. Peasants in the World Economy. (3). Crosscultural survey of state and global societies as they influence peasants in different regions; technological, environmental, economic, political and interpersonal factors shaping peasant livelihood, social organization, culture and worldview, national and international forces of change in relation to role of anthropology in development.

4051-6051. Anthropology and Education. (3). Advanced study of cultural transmission process with emphasis on identifying differing behavioral, cognitive and learning styles of various ethnic groups within American society and selected third world countries. Encounters of U.S. subcultural groups with public education system. PREREQUISITE: permission of instructor.

4065-6065. Contemporary Anthropological Theory. (3). Contemporary growth of theories and methods in anthropology.

4111-6111. Human Adaptations. (3). Human populations and their variability, examination of human adaptations in locomotion and manipulation, facial structure, brain and language, and reproduction; comparisons to anatomy, physiology, and behavior of other primates.

4251-6251. Psychological Anthropology. (3). (4751). Comparison of factors involved in analysis of personality as contrasted to culture; interaction of these factors; problems of studying personality crossculturally.

4252-6252. Economic Anthropology. (3). Comparative analysis of economic systems and their functional relationships to other cultural institutions; production, distribution, and consumption; concepts of wealth, value, property, and ownership.

4253-6253. Anthropology of Religion. (3). Comparative analysis of religious systems and their functional relationships to other cultural institutions; interrelations of myth, magic, and ritual; types of religious institutions and religious practitioners.

4255-6255. Applied Anthropology and Development. (3). Cross-cultural review of processes of change, grassroots development and planning in the industrialized world, models of change, specializations in applied anthropology, and development of public policy on international issues of housing, education, health and economic development.

4260. Field Problems in Research. (3). Application of social science knowledge and methods to research projects in local community or region; development of individual projects according to student's concentration, or work in cooperation with social and human services agencies and other community organizations.

4301-6301. Archaeology of North America. (3). (3331). Description and distribution of prehistoric cultural remains in North America and MesoAmerica. Major regional sequences, extending from the earliest evidences of human occupation until historic times.

4325-6325. Archaeological Field Techniques. (3). Instruction in field excavation, specimen preparation, use of survey instruments and photography, map making, archaeological record keeping. *May be repeated for a maximum of 6 hours credit.* PREREQUISITE: permission of instructor.

4326. Archaeological Laboratory Analysis. (3). Methods and techniques of archaeology laboratory; emphasis on preparation of artifacts and records for interpretation and curation. *May be repeated for a maximum of 6 hours credit.* PREREQUISITE: permission of instructor.

4330-39-6330-39. Special Topics in Archaeology. (3). Analysis of selected topics in archaeology. *May be repeated for maximum of six hours credit.*

4360-6360. Environmental Reconstruction. (3). Advanced study of cultural ecology in past environmental regimes. Emphasis on interdisciplinary approach to extinct social systems and their relationship with environment.

4370-6370. Historic Archaeology. (3). Review of contributions of archaeologists to historical research. Methods and techniques of archaeologists as required and modified by excavation and interpretation of historic materials. Allied specialties unique to Historic Archaeology including documentary investigations and conservation and restoration of existing structures.

4380-6380. Museums in Society. (3). (Same as ART 4380). History of museums and how they function in society. Development of major collections and role of museums as centers of research and education and as interpreters of social values.

4382-6382. Professional Practices In Museums. (3). (Same as ART 4382). Basic aspects of museum organization. Roles of director and trustees; responsibilities of professional staff including registrars and curators; and scope of museum education programs. Features presentations by museum professionals. **[W]**.

4390-6390. Archaeology. (3). Introduction to basic archaeological concepts. Topics include history of archaeology; theory, methodology, and techniques; and research strategies.

4411-6411. Urban Anthropology. (3). Anthropological studies of pre-industrial and industrial cities. Urbanization, movements of social transformation and other processes of adjustment to urban milieu. Urban slums, ethnic enclaves and housing developments in cross-cultural perspective. Urban kinship and social organization. Urban community development. Urban research techniques.

4412-6412. Neighborhood Development & Poverty. (3). Role of various institutions and their relationship to developmental needs of inner-city neighborhoods. Evolution of American cities as context for understanding urban neighborhoods and poverty. Particular attention to role of government and foundations in shaping policy at local level. Rise of neighborhood associations and non-profits as extensions of family values. Role of anthropologist in contributing to better understanding of neighborhoods and various intervention strategies particularly in the Mid-South.

4413-6413. Anthropology of Tourism. (3). Advanced study of developing field of tourism in anthropology. Explores cultural dynamics and dilemmas of tourism and tourist development. Different forms of tourism (mass, elite, eco, ethnic and heritage) assessed both in terms of impacts on host culture and its environment as well as tourists themselves. Tourism assessed as a development alternative, a driver of cultural change, and a form of local, regional national, international and intercultural relations. PREREQUISITE: ANTH 1200.

4414-6414. Comparative Work and Production Systems. (3). Advanced study of changes in work units and production systems beginning with early industrial capitalism, evolving through stages of integrated mass production, and finally the current restructuring of a global system. Focus on flexible mass production, involvement of the periphery, workplace innovation, international labor migration and human resource development. PREREQUISITE: ANTH 1200 or ANTH 3282.

4420-6420. American Folklore. (3). Selected genres of American folklore, including folk religion and belief, folk medicine, folksong and music, narrative and humor (jokes and riddles). Comparisons to other cultures. Emphasis on role of folklore in maintenance of tradition, in social change, and in concept of culture.

4511-6511. Medical Anthropology. (3). Cross-cultural analysis of bio-behavioral components of infectious, nutritional, genetic, chronic and psychiatric diseases. Individual and cultural reactions to medical care, professionals and health care delivery systems.

4521-6521. Folk Medicine In the U.S. (3). Medical alternatives to standard health care system. Concepts of illness associated with such practices as use of medicinal plants, faith healing, chiropractic. Clinical effectiveness of folk herbal medicine and psychotherapy. Health professional's role in caring for persons with different perceptions of health and disease emphasized.

4531-6531. Alcohol, Culture, and Biology. (3). Cross-cultural comparison of beliefs, rituals, meaning of alcohol consumption and alcoholism. Examination of biological and cultural evidence for development of alcohol related problems. Implications for prevention, early intervention, and treatment.

4541-6541. Nutritional Anthropology. (3). Human nutrition in cross-cultural perspective. Basic nutritional requirements. Interrelations of dietary behavior with resource availability and with cultural attitudes regarding nutritive and health values for foods. Dietary aspects of acculturation and culture change. Methodology in assessment of nutritional status and nutritional insufficiencies. Exemplary case studies.

4551-6551. Culture and Childbirth. (3). Review of biological, environmental, social and cultural factors influencing human reproduction; individual, community and clinical approaches to fertility, birth control, pregnancy, birth and post-partum care; alternative delivery systems.

4561-6561. Cultural Context of Deviant Behavior. (3). Reviews perceptions of normality in different societies, cultural definitions of and responses to deviance, promotion and discouragement of inappropriate behavior; evaluates mental illness, violence, drug abuse, cannibalism, suicide, sexual practices and everyday behavior in relation to cultural definitions of normality.

4975. Directed Individual Readings. (1-4). Intensive guided survey of anthropological and related literature dealing with topics selected by advanced students and accepted by staff. Compilation, synthesis, and evaluation of published data; preparation for students considering anthropology as a profession. PREREQUISITE: permission of chair and designated staff.

4985. Directed Individual Research. (1-3). Intensive guided survey of original data, in areas selected by advanced students and accepted by staff. Collection and/or processing of data in physical anthropology, ethnology, applied and urban anthropology, archaeology, and linguistics; description, classification, analysis, and synthesis. Preparation for publication. PREREQUISITE: permission of chair and designated staff.

4990-99. Special Topics In Anthropology. (3). *May be repeated for credit when topic varies.*

BIOLOGY

PROFESSOR
MELVIN L. BECK, *Chair*
Room 103, Ellington Building
http://www.people.memphis.edu/~biology

Effective Fall 1996, the Biology Department was reorganized into two departments: (1) Biology and (2) Microbiology and Molecular Cell Sciences (MMCS). Additional biological science courses are listed under the Microbiology and Molecular Cell Sciences (MMCS) departmental heading.

Students must complete BIOL 1151, 1152, 1161 and 1162 before enrolling in any upper division course that is accepted as credit toward a biology major or minor.

ADVANCED PLACEMENT

Beginning freshmen who have completed an advanced biology course in high school may apply to the chair of the Department of Biology during the semester preceding enrollment for advanced placement.

Freshmen scoring 3 on the Advanced Placement Test will receive credit hours for BIOL 1071, 1072, 1081 and 1082. Those scoring 4 or higher will receive credit hours for BIOL 1151, 1152, 1161 and 1162.

BIOLOGY (BIOL)

1071. A Human Perspective I. (3). (1061). General overview of cellular structure and function, genes and biodiversity. NOTE: *Credit will not apply toward a major or minor in the sciences, nor will it satisfy any part of science requirements for pre-professional curricula. Three lecture hours per week.* **[G]**

1072. A Human Perspective Laboratory I. (1) (1062). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE OR COREQUISITE: BIOL 1071. **[G]**

1081. A Human Perspective II. (3) (1051). Continuation of general overview of life; emphasis on structure and function of organisms and biosphere. NOTE: *Credit will not apply toward a major or minor in the sciences, nor will it satisfy any part of science requirements for pre-professional curricula. Three lecture hours per week.* **[G]**

1082. A Human Perspective Laboratory II. (1) (1052). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE OR COREQUISITE: BIOL 1081. **[G]**

1151. General Biology 1. (3). (1111). Unifying principles of biology with emphasis on cell structure, cell function, heredity, development and evolution. *Three lecture hours per week.* **[G].**

1152. General Biology Laboratory I. (1). (1111 lab). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE OR COREQUISITE: BIOL 1151. **[G].**

1161. General Biology II. (3). (1112). Continuation of BIOL 1151 with emphasis on origin and diversity of life; structure, functions, and ecology of organisms. *Three lecture hours per week.* **[G].**

1162. General Biology Laboratory II. (1). (1112 lab). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE OR COREQUISITE: BIOL 1161. **[G].**

1751. Anatomy and Physiology I. (3). (1731). Detailed study of structure and functions of human organism. Credit not acceptable for Biology major or minor. *Three lecture hours per week.*

1752. Anatomy and Physiology Laboratory I. (1). (1731 lab). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE OR COREQUISITE: BIOL 1751.

1761. Anatomy and Physiology II. (3). (1732). Continuation of BIOL 1751. Credit not acceptable for Biology major or minor. *Three lecture hours per week.*

1762. Anatomy and Physiology Laboratory II. (1). (1732 lab). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. *Two laboratory hours per week.* PREREQUISITE OR COREQUISITE: BIOL 1761.
Students must complete BIOL 1151, 1152, 1161 and 1162 before enrolling in any upper division course that is accepted as credit toward a biology major or minor.

3030. Principles of Animal Physiology. (4). Basic concepts of animal function, including study of many invertebrate phyla and most classes of vertebrate organisms. *Two lecture, four laboratory hours per week.* PREREQUISITE: 8 hours of animal biology or equivalent and COREQUISITE: CHEM 3311.

3050. General Ecology. (4). Relationships between organisms and their environment; emphasis on fundamental principles. Topics include: nutrient cycles limiting factors, population dynamics, community succession and structure, species interactions, and human ecology. *Two lecture, four laboratory hours per week.* **[C, W].**

3071. Human Genetics. (3). Genetic principles as they apply to humans, including pedigree analysis, genetic counseling, genetic engineering, and eugenics. *Three lecture hours per week.* PREREQUISITE: BIOL 3072.

3072. Genetics. (3). (3070). Principles of heredity, including classical, microbial, molecular, and population genetics. *Three lecture hours per week. Credit for both 3072 and 3073 must be earned to improve grade in 3070.* PREREQUISITE: 16 hours in the biological sciences (BIOL and MMCS), including MMCS 3130 or 3500. **[C, I].**

3073. Genetics Laboratory. (1). (3070 lab). Laboratory experiments in classical, microbial, molecular, and population genetics designed to illustrate principles of heredity. *Three laboratory hours per week. Credit for both 3072 and 3073 must be earned to improve grade in 3070.* PREREQUISITE OR COREQUISITE: BIOL 3072 or equivalent.

3110. Introduction to Toxicology. (2). (1110). Survey of field of toxicology. Examination of multidisciplinary aspects of toxicology. *Two lecture hours per week.* PREREQUISITE: CHEM 1132.

3170. Heredity. (3). Principles of heredity with applications to human problems, for non-science majors and recommended for students who desire a better understanding of heredity and eugenics. *Not acceptable as credit toward biology major or minor.*

3200. General Botany. (4). Structure, function and diversity of plants. *Two lecture, four laboratory hours per week.*

3220. General Plant Anatomy. (4). Comparative development and structure of roots, stems, and leaves in flowering plants. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 3200 or consent of instructor.

3230. Plant Physiology. (4). (4232). Principles of physiology and application to living organisms; emphasis on higher plants. *Three lecture, three laboratory hours per week.*

3610. Vertebrate Embryology. (4). Development of selected vertebrate embryos from fertilized egg cell. *Two lecture, four laboratory hours per week.*

3620. Comparative Anatomy of Vertebrates. (5). Origin, development, structure, and functions of organs and systems of selected forms of vertebrates. *Two lecture, six laboratory hours per week.*

3730. Vertebrate Physiology. (4). Normal function of the organ systems of vertebrates, with an emphasis on mammals. *Three lecture, two laboratory hours per week.*

3751. Vertebrate Zoology. (2). (3700). Life histories, adaptations, ecology, distribution, behavior, and classification of vertebrates. *Two lecture hours per week.*

3752. Vertebrate Zoology Laboratory. (2). (3700 lab). Laboratory observations, demonstrations, and experiments designed to apply scientific methods to lecture subjects. *Four laboratory hours per week.* PREREQUISITE OR COREQUISITE: BIOL 3751.

3800. Parasitology. (4). Distribution, morphology, life history, economic importance, and control of some of parasites of man and domestic animals. Protozoa through helminths. *Two lecture, four laboratory hours per week.*

3960. Medical Entomology. (4). Distribution, morphology, life history, medical importance, and control of insects and other arthropods that serve as vectors for disease-producing organisms. *Two lecture, four laboratory hours per week.*

4000. Research. (1-4). Consultation, reading, and laboratory or field work to investigate selected area of biology under supervision of faculty member; formal paper is required. *May be repeated for maximum credit of 4 hours.* (S/U).

4002-6002. Toxicology. (3). Effects of foreign substances on biological mechanisms. Absorption, excretion, metabolism, and biotransformation of potentially harmful substances. *Three lecture hours per week.* PREREQUISITES: A course in physiology and CHEM 3312.

4050-6050. Field Technique In Ecology. (4). Field techniques of applied ecology covering practical training in forest, field, aquatic, and atmospheric sampling and analysis. Extended field trips. *Two lecture, four laboratory hours per week.* PREREQUISITE: consent of instructor.

4053-6053. Plant Ecology. (4). Relationships of plants and environmental factors at physiological, population, and community scales; study of ecosystem dynamics at local and landscape scales; emphasis on field techniques. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 3050.

4054-6054. Wetland Ecology. (4). Study of wetlands and wetland resources; attributes of hydrology, biogeochemistry and wetland plants with emphasis on bottomland hardwood forests. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL3050 and consent of instructor.

4055-6055. Ecological and Environmental Issues. (3). Ecological perspective on current environmental issues such as conservation and biodiversity, global climatic change, regulation of chemicals in environment. *Three lecture hours per week.* PREREQUISITE: BIOL 3050 or consent of instructor.

4060-6060. Limnology. (4). Physical and chemical attributes of lakes, ponds, and streams; organisms of fresh water, problems of production, practical training in limnological methods and identification of organisms. *Two lecture, four laboratory hours per week.* PREREQUISITE: one year of chemistry.

4090-99. Special Topics in Biology. (1-3). Topics are varied and announced in *Schedule of Classes. May be repeated with different topics for maximum of 4 hours.* PREREQUISITE: junior standing and permission of instructor.

4100-6100. Evolution. (3). Synthesis of principles and concepts of modern evolutionary theory. Topics include geologic evolution, biological evaluation, and evolution of societies. Emphasis on recent development and current controversies. *Three lecture hours per week.*

4570. Practicum In Biology. (1-4). Directed extradepartmental studies in special areas of biology. *A maximum of four hours credit may be applied toward degree requirements.* PREREQUISITE: BIOL 3050 and permission of department chair. (S/U).

4604-6604. Ethology. (4). Animal behavior, primarily from ecological, physiological, developmental and evolutionary perspective. *Two lecture, two laboratory hours per week.*

4620-6620. Vertebrate Histology. (4). Microscopic study of normal tissues and organs of vertebrate body. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 3610 or 3620 or permission of instructor.

4630-6630. General Endocrinology. (3). Anatomy and physiology of the organs of internal secretion; role of hormones in metabolism and development. PREREQUISITE: An upper division physiology course.

4640-6640. Ornithology. (4). Biology of birds, with emphasis on avian anatomy, physiology, behavior, and reproductive biology. Field trips emphasize identification of local species and techniques of field study. *Two lecture, four field/laboratory hours per week.*

4644-6644. Ichthyology. (4). Collection, preservation, identification, life histories, management, and economic importance of fishes. *Two lecture, four laboratory hours per week.*

4651-6651. Field Techniques of Vertebrate Zoology. (4-6). Techniques in field study of vertebrates. Extended field studies outside local area.

4740-6740. Mammalogy. (4). Classification, distribution, life histories, economic importance, techniques of field study, methods of collection and preservation of mammals. *Two lecture, four laboratory hours per week.*

4744-6744. Herpetology. (4). Classification, distribution, life histories, techniques of collection and preservation, and natural habitats of North American reptiles and amphibians. *Two lecture, four laboratory hours per week.*

4820-6820. Protozoology. (4). Free living and parasitic protozoa; consideration to structure, function, taxonomy, habitat, and life history. *Two lecture, four laboratory hours per week.*

4840-6840. Invertebrate Zoology. (4). (3840). Invertebrate phyla with emphasis on phylogeny, embryology, and ecology of selected groups. Extended field trip. *Two lecture, four laboratory hours per week.* PREREQUISITE: Permission of instructor.

4900-6900. Entomology. (4). (3900). Morphology, physiology, behavior and ecology of insects. *Three lecture, two laboratory hours per week.*

4930-6930. Insect Physiology. (4). Physiology as applied to life processes of insects. *Two lecture, four laboratory hours per week.*

The following courses are taught only at the Gulf Coast Research Lab, Ocean Springs, Mississippi. The University of Memphis residence credit is given through affiliation with the laboratory.

4010-6010. Aquaculture. (6). Review of technology, principles, and problems relating to the science of aquaculture with emphasis on culture of marine species. PREREQUISITES: 16 hours of zoology including invertebrate and vertebrate zoology or ichthyology.

4020-6020. Comparative Histology of Marine Organisms. (1-6). Histological organization of representative marine organisms. Fixation, processing, and study of tissues using light microscopy, transmission and scanning electron microscopy. Structural changes and physiological changes during life cycle of organism including histopathology. PREREQUISITE: consent of instructor.

4051-6051. Marine Ecology. (5). Relationship of marine organisms to environment includes effects of temperature, salinity, light, nutrient concentration, currents, food, predation and competition on the abundance and distribution of marine organisms. PREREQUISITES: 16 hours of biology including general zoology, general botany, and invertebrate zoology.

4052-6052. Salt Marsh Plant Ecology. (4). Emphasis on botanical aspects of local marshes; includes plant identification, composition, structure, distribution and development of coastal marshes. Biological and physical interrelationships. Primary productivity and relation of marshes to estuaries and associated fauna. PREREQUISITES: general botany, plant taxonomy, plant physiology, and general ecology or consent of instructor.

4200-6200. Marine Botany. (4). Local examples of principal groups of marine algae and maritime flowering plants, treating structure, reproduction, distribution, identification and ecology. PREREQUISITES: ten hours of biology, including introductory botany.

4300-6300. Coastal Vegetation. (3). General and specific aspects of coastal vegetation; emphasis on local examples. PREREQUISITES: 10 hours of biology including general botany.

4500-6500. Marine Microbiology. (5). Role of microorganisms in overall ecology of oceans and estuaries. PREREQUISITES: general microbiology and environmental microbiology or consent of instructor.

4600-6600. Marine Vertebrate Zoology and Ichthyology. (6). Marine Chordata, including lower groups of mammals and birds; emphasis on fishes. PREREQUISITES: sixteen semester hours of zoology including comparative anatomy or consent of instructor.

4610-6610. Early Life History of Marine Fishes. (4). Reproductive strategies and developmental processes of marine fishes. Temporal and spatial distribution patterns, population dynamics, and ecological interactions of fish eggs and larvae. Methods of sampling and identifying eggs and larvae. PREREQUISITES: ichthyology, fisheries, biology, ecology, and/or consent of instructor.

4646-6646. Marine Fisheries Management. (4). Overview of practical marine fishery management problems. PREREQUISITE: consent of instructor.

4700-6700. Behavior and Neurobiology of Marine Animals. (4). Behavior, neuroanatomy, and neurophysiology of marine animals with emphasis on neural mechanisms underlying behavior of selected invertebrates, fishes, birds and mammals. PREREQUISITES: 16 hours of zoology and/or psychology or consent of instructor.

4800-6800. Marine Invertebrate Zoology. (6). Important free-living, marine estuarine invertebrates of the Mississippi Sound and adjacent continental shelf of the northeastern Gulf of Mexico, emphasis on structure, classification, phylogenic relationships, larval development and functional processes. PREREQUISITES: 16 hours of zoology including introductory invertebrate zoology.

4844-6844. Parasites of Marine Animals. (6). Parasites of marine animals; emphasis on morphology, taxonomy, life histories and host-parasite relationships. Lecture, laboratory and field work included. PREREQUISITES: general parasitology or consent of instructor.

4850-6850. Fauna and Faunistic Ecology of Tidal Marshes. (4). Survey and discussion of taxonomy, distribution, trophic relationships, reproductive strategies and adaptation of tidal marsh animals; emphasis on those occurring in northern Gulf marshes. PREREQUISITES: 16 hours of biology and junior standing or consent of instructor.

CHEMISTRY

PROFESSOR
HENRY KURTZ, *Chair*
Room 210, J.M. Smith Hall

http://www.chem.memphis.edu/umchem.html

The Department of Chemistry offers courses leading to the B.S. degree with a major in chemistry. The department also offers a program culminating in the professional degree of Bachelor of Science in Chemistry (B.S.Ch.). This program is designed to meet the requirements of the Committee on Professional Training of the American Chemical Society, and is undertaken primarily by students who desire to go directly to positions in the chemical industry, or to enroll for postgraduate study in chemistry.

SEQUENCE OF COURSES

Students who present credit for at least two years of high school mathematics (including algebra), or who have an ACT mathematics score of 22 or better, should enroll in CHEM 1121, 1131 if they plan to take more than one year of college chemistry, or plan to major in either a natural science or in civil, mechanical, or electrical engineering. CHEM 1100 is a one-semester course for students of limited preparation in mathematics whose curriculum calls for the CHEM 1121/1131-1122/1132 sequence. CHEM 1101-1102 is a two-semester sequence for students interested in the science of chemistry, but is not credited toward a major in chemistry or physics. It does fulfill the university science requirements of other majors. Credit may not be received for both CHEM 1100 and CHEM 1131 simultaneously. These courses emphasize fundamental principles and concepts and are designed for nonscience majors interested in a study of several areas of physical science.

GENERAL EDUCATION NATURAL SCIENCE REQUIREMENTS

Completion of the following 8-credit hour sequences will satisfy one of the options for the General Education Natural Science requirement: CHEM1101(4)/1102(4) OR CHEM 1121(1)/1131(3)/1122(1)/1132(3).

ADVANCED PLACEMENT

Beginning students who have had previous high school training in chemistry are invited to apply for advanced placement.

LABORATORY SAFETY AND COURSE REQUIREMENTS

Laboratory safety is strictly practiced in the Department of Chemistry. Approved eye protection must be worn as required in all chemical laboratories. In addition, to ensure that students enrolled in laboratory courses learn the necessary safety information to safely participate in the laboratory course, all prerequisites and/or corequisites for all laboratory courses are strictly enforced. As a result, when a student enrolls in a laboratory course without prior completion of the necessary prerequisite or corequisite, the student will be dropped from the laboratory course. In addition, when a student simultaneously enrolls in a laboratory course and corequisite course, but subsequently drops or discontinues the corequisite course, the student will be dropped from the laboratory course. In the event any student fails to comply with any safety requirements of the Department of Chemistry, the department has the right to not allow the student to perform laboratory work, or to withdraw the student from the laboratory course, as appropriate.

CHEMISTRY (CHEM)

1100. Introduction to Chemistry. (3). For students whose curriculum requires CHEM 1131, but who feel their background is inadequate. Emphasis on scientific calculations and properties of matter. *Three lecture hours per week. Not credited toward major in chemistry, physics, physical science, or engineering, nor does it satisfy any part of science requirement for any degree. Nor applicable toward fulfilling 132-hour minimum for degrees in The College of Arts and Sciences.* COREQUISITE: MATH 1211 or 1212 recommended.

1101. College Chemistry I. (4). (1051). Fundamental laws of chemistry and impact of chemistry on modern society. *Prior knowledge of algebra needed. Three lecture, two laboratory hours per week.* Not credited toward major in chemistry or physics. **[G]**.

1102. College Chemistry II. (4). (1052). Emphasis on elementary organic and biochemistry. *Three lecture, two laboratory hours per week. Not credited toward major in chemistry or physics.* PREREQUISITE: CHEM 1101. **[G]**.

1121. Principles of Chemistry Laboratory. (1). (1111 lab). Experiments and experimental techniques in general chemistry. *Three laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 1131. **[G]**.

1122. Principles of Chemistry Laboratory. (1). (1112 lab). Continuation of CHEM 1121. *Three laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 1132. **[G]**.

1131. Principles of Chemistry. (3). (1111). For students who are majoring in one of the physical sciences, biology, mathematics or engineering, or who are following a pre-professional program requiring additional chemistry. *Three lecture hours per week.* COREQUISITES: MATH 1211, 1212 or 1321; CHEM 1121 recommended. **[G]**

1132. Principles of Chemistry. (3). (1112). Continuation of CHEM 1131. *Three lecture hours per week.* PREREQUISITE: CHEM 1131. COREQUISITE: 1122 recommended. **[G].**

3201. Quantitative Chemical Analysis Laboratory. (2). (3404). Application of the techniques of quantitative analysis in areas described in CHEM 3211. *Six laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 3211 **[C]**.

3211. Quantitative Chemical Analysis. (2) (3400). Theory and practice of modern chemical analysis. Includes: acid-base, redox, and complex ion equilib-

ria, separation methods, absorptiometry, flame spectroscopy, and electroanalytical methods. *Two lecture hours per week.* PREREQUISITE: CHEM 1122, 1132. COREQUISITE: CHEM 3201 recommended. **[C]**.

3301. General Organic Chemistry Laboratory. (1). Emphasis on laboratory techniques as applied to synthesis and class reactions. *Three laboratory hours per week.* PREREQUISITE: CHEM 1122, 1132. PREREQUISITE or COREQUISITE: CHEM 3311.

3302. General Organic Chemistry Laboratory. (1). Continuation of CHEM 3301; emphasis on correlation of chemical behavior with structure. *Three laboratory hours per week.* PREREQUISITES: CHEM 3311 and 3301 COREQUISITE or PREREQUISITE: CHEM 3312.

3311. General Organic Chemistry. (3). Systematic study of preparations and properties of organic compounds, including interpretations based on modern theories of organic chemistry. Emphasis on aliphatic and aromatic hydrocarbons, their halogen derivatives, and alcohols. *Three lecture hours per week.* PREREQUISITE: CHEM 1132.

3312. General Organic Chemistry. (3). Continuation of CHEM 3311; emphasis on more important functional derivatives of aliphatic and aromatic hydrocarbons. PREREQUISITE: CHEM 3311.

3401. Elementary Physical Chemistry. (3). Abbreviated course in physical chemistry. Includes elementary thermodynamics, phase transitions, solution chemistry, electrochemistry, kinetics, colloidal and surface chemistry, and molecular polarity. Credit may be obtained either in this course or in 3411, but not both. *Three lecture hours per week.* PREREQUISITES: CHEM 3211 or 3311, PHYS 2002/2120 or 2004/2520.

3402. Physical Chemistry Laboratory. (2). Measurements of physical properties, reaction rates, and equilibria. Application of electrochemistry and calorimetry. *Six laboratory hours per week.* PREREQUISITE: CHEM 3411. COREQUISITE or PREREQUISITE: CHEM 3412.

3411. Physical Chemistry. (3). Thermochemical foundations of physical chemistry applied to open and closed systems, kinetic theory of gases, and surface chemistry. *Three lecture hours per week.* PREREQUISITES: PHYS 2002/2120 or 2004/2520; MATH 2321.

3412. Physical Chemistry. (3). Continuation of CHEM 3411 emphasizing kinetics of chemical reactions, quantum chemistry, chemical bonding, statistical mechanics, spectroscopy, and other methods of structure determination. *Three lecture hours per week.* PREREQUISITE: CHEM 3411.

4001-6001. Environmental Chemistry. (3). Chemical phenomena occurring in soil, atmospheric and aquatic environments; consideration of natural resources and energy. *Three lecture hours per week.* PREREQUISITE: CHEM 3311.

4101-6101. Inorganic Chemistry Laboratory. (1). Experimental techniques of inorganic synthesis and physical methods for characterization of inorganic and organometallic compounds. *Three laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 4111-6111.

4111-6111. Inorganic Chemistry. (3). (CHEM 4210). Theoretical and applied inorganic chemistry. Stress on relationship of structure and bonding to properties of elements and compounds. Includes introductory molecular orbital theory, coordination compounds and organometallics, ligand field theory, nonaqueous solvent systems, and reaction mechanisms. *Three lecture hours per week.* PREREQUISITE: CHEM 3412 or permission of the instructor. COREQUISITE: CHEM 4101 recommended.

4180-99-6180-99. Special Topics In Inorganic Chemistry. (1-3). Topics in inorganic chemistry that are of current interest. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 3312 and permission of instructor.

4201-6201. Instrumentation Laboratory. (2). (4220 lab.) Laboratory exercises that apply topics that are introduced in CHEM 4211. These include: measurement signals, enhancement of signal-to-noise, fundamentals of electronics, applications of solid-state electronic devices, and the role of computers in data acquisition. *Six laboratory hours per week.* COREQUISITE: CHEM 4211.

4211-6211. Advanced Instrumental Analysis. (2) (4220). Advanced topics in electrochemical, atomic spectroscopic, and chromatographic methods, and an introduction to electronic and optical principles of chemical instrumentation. Basic principles and instrumentation for mass spectrometry, infrared spectroscopy, and nuclear magnetic resonance will also be presented. *Two lecture hours per week.* PREREQUISITE: CHEM 3211 and 3412.

4280-99-6260-99. Special Topics In Analytical Chemistry. (1-3). Topics of current interest in analytical chemistry. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 3412 and permission of instructor.

4311-6311. Intermediate Organic Chemistry. (3). Further study of physical organic chemistry, spectrometric methods of identification of organic compounds, modern organic synthesis, and natural products chemistry. *Three lecture hours per week.* PREREQUISITE: CHEM 3312.

4315-6315. Organic Medicinal Chemistry. (3). Introduction to principles of medicinal chemistry. Structure, synthesis, and biochemical mechanism of action of major drug classes. *Three lecture hours per week.* PREREQUISITE: CHEM 3312.

4380-99-6380-99. Special Topics In Organic Chemistry. (1-3). Topics of current interest in organic chemistry. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 3312 and permission of instructor.

4411-6411. Advanced Physical Chemistry. (3). Advanced topics in physical chemistry including statistical mechanics and statistical thermodynamics plus selected topics in the areas of kinetic theory of gases, condensed phases, and nonequilibrium processes. PREREQUISITE: CHEM 3412 or permission of instructor.

4415-6415. Computational Chemistry. (3). Application of computers to address problems in organic and inorganic chemistry. Emphasis is on use of quantum chemistry codes to solve problems related to electronic, molecular, and vibrational structure problems. PREREQUISITE: CHEM 3412 and permission of instructor.

4480-99-6480-99. Special Topics in Physical Chemistry. (1-3). Topics of current interest in physical chemistry. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 3412 and permission of instructor.

4501-6501. Biochemistry Laboratory I. (1). (Same as MMCS 4503-6503). Survey of common biochemical techniques and the properties of biological molecules. Assay of enzymes and enzyme kinetics stressed. *Three laboratory hours per week.* PREREQUISITES: CHEM 3302, or CHEM 3201 and 3301. PREREQUISITE or COREQUISITE: MMCS 4511 or CHEM 4511.

4502-6502. Biochemistry Laboratory II. (1). (Same as MMCS 4504-6504). Biochemical laboratory techniques, emphasis on protein purification and characterization. *Three laboratory hours per week.* PREREQUISITES: MMCS 4511 or CHEM 4511, or consent of instructor.

4511-6511. Biochemistry I. (3). (Same as MMCS 4511-6511). Chemistry of amino acids and proteins related to their properties in biochemical systems. Enzymology, including kinetics and conformation studies. Coenzymes and their functions. Chemistry of carbohydrates, lipids, and nucleotides. *Three lecture hours per week.* PREREQUISITE: CHEM 3312.

4512-6512. Biochemistry II. (3). (Same as MMCS 4512-6512). Continuation of CHEM 4511. Metabolism of carbohydrates, amino acids and nucleotides. Biochemistry of DNA and RNA, including their relationship to biosynthesis of proteins. Metabolic control. *Three lecture hours per week.* PREREQUISITE: MMCS 4511 OR CHEM 4511.

4580-99-6560-99. Special Topics in Biochemistry. (1-3). Topics of current interest in biochemistry. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 4512 and permission of instructor.

4601-6601. Chemical Demonstrations. (3). Preparing and presenting demonstrations and activities to illustrate chemical principles, processes, and properties for secondary and post-secondary classes. *One lecture/four laboratory hours per week.* PREREQUISITE: CHEM 3302, CHEM 3312 or permission of instructor.

4602-6602. Teaching High School Chemistry Laboratory. (3). Instruction in selection, modification, evaluation, and teaching instructional chemistry experiments in high schools; includes planning pedagogical goals, laboratory organization and safety, purchasing supplies, and student evaluation. *Two lecture/two laboratory hours per week.* PREREQUISITE: CHEM 3302, CHEM 3312 or permission of instructor.

4604. Instrumental Methods. (3). (3604). Analytical instrumental techniques including molecular spectroscopy, chromatography, atomic spectroscopy, and electrochemical analysis. *One lecture, six laboratory hours per week.* PREREQUISITES: CHEM 3201, 3211, 3312, or permission of instructor. **[I]**.

4911-6911. Chemical Literature and Seminar. (1). Use of chemical literature, writing of technical reports, and oral presentation of investigative reports. *One lecture hour per week.* PREREQUISITE: permission of instructor.

4991. Chemical Research. (1). (See description under CHEM 4993.)

4992. Chemical Research. (2). (See description under CHEM 4993.)

4993. Chemical Research. (3). Introduction to basic research. Student collaborates with a faculty sponsor on problem of mutual interest selected from fields of analytical computation, inorganic, organic, and physical chemistry, and biochemistry. Experience gained in effective laboratory techniques, critical experiment design, and preparing a formal scientific paper. To receive credit toward a major in chemistry, student must complete three semester hours in these research courses. *Three to nine laboratory hours per week.* PREREQUISITE: CHEM 3312 and permission of instructor. Students expected to complete prospectus in consultation with a faculty sponsor before registering for this course **[W]**.

CRIMINOLOGY AND CRIMINAL JUSTICE

PROFESSOR
JERRY R. SPARGER, *Chair*
Room 405, Mitchell Hall
http://www.people.memphis.edu/~cjustice/cjus.htm

CJUS 3129 is a prerequisite for all upper division courses except CJUS 3510 and 3521. CJUS 3130 is a prerequisite or corequisite for CJUS 3541. CJUS 1100, 3129, 3130, 3510, 3521, and 3541 are prerequisites for all upper division electives. The department chair may grant exceptions to these requirements for selected elective courses.

CRIMINOLOGY AND CRIMINAL JUSTICE (CJUS)

1100. Introduction to Criminal Justice. (3). Introduction to American criminal justice system in its three dimensions: police, courts, and corrections, tracing its development from ancient and early English beginnings to present time. **[G]**.

2110. Comparative Justice Systems. (3). Overview of justice systems of various countries, focusing primarily on substantive and philosophical relationships between the subsystems and the society they serve. **[G]**.

2520. Street Law: A Course in Practical Law. (3). Practical application of law to everyday problems. Legal processes and resources available to every citizen; case materials in criminal, consumer, environmental, and family law with reference to their relationship in criminal justice context. Credit earned does not apply toward major or minor in Criminology and Criminal Justice.

3129. Statistical Methods In Criminal Justice. (3). Statistical methods commonly utilized in criminal justice research; emphasis on descriptive and inferential statistics, measures of significance, and interpretation of results; introduction to micro-computers. *Two lecture, two laboratory hours per week.* PREREQUISITE. CQMP 1200 or equivalent, and MATH 1211, 1312 or 1321. **[C]**.

3130. Research Methods In Criminal Justice. (3). (3128). Techniques commonly utilized in criminal justice research, emphasis on research design, methods of data collection, measurement of variables, and threats to validity and reliability; use of microcomputers and statistical programs for data collection and analysis. PREREQUISITE: CJUS 3129.

3152. Drug Addiction and Alcoholism. (3). Cultural and medical aspects of use of alcohol and various other drugs; consideration of roles of law enforcement and corrections in these areas.

3226. Police In America. (3). (3526). Comparative analysis of problems, procedures, organization, and functions of effective police organization.

3326. Courts in America. (3). Exploration and analysis of structure, process, personnel, policy, and legal theory in the American judicial system.

3426. Corrections In America. (3). Concepts of organizational behavior applied to probation, parole, community-based corrections, prisons, and other detention facilities, with emphasis on their history and practice.

3510. Law and Society. (3). Law as system of control and as mechanism for resolution of conflict. Relationship of law to political, economic and social systems critically analyzed and development of legal profession studied.

3521. Constitutional Criminal Procedure. (3). General application of U.S. constitution principles to investigative and prosecutorial process of the criminal justice system; emphasis on requirements of the 4th, 5th. 6th, 8th, and 14th Amendments as they relate to arrest, search, and seizure, interrogation and identification procedures, trial and appellate proceedings.

3541. Criminology. (3). Nature and significance of criminality; etiology of illegal behavior; trends in social reactions to crime and criminals. Evolution of biological, psychological, and sociological theories of criminal behavior.

3542. Crime and Criminal Typologies. (3). (4120). Classification of crime and typical elements involved in each type of crime, classification of criminal offenders and salient career variables associated with each type of offender relative to background, crime, and career prognosis.

4010-19-6010-19. Special Topics In Criminal Justice. (1-3). Topics are varied and announced in *Schedule of Classes.*

4100. Individual Directed Study In Criminal Justice. (1-4). Individual directed reading and research in special areas of interest in field of criminal justice. PREREQUISITE: permission of department chair. NQTE: *Course may be repeated for a maximum of 4 hours total credit.*

4110. Senior Seminar in Criminal Justice. (3). Analysis of criminal justice issues from a systems perspective; emphasis on active learning, gaining familiarity with criminal justice resources, and development of analytical and writing skills. PREREQUISITE: senior standing in Criminology and Criminal Justice and permission of department chair. **[W, I]**.

4126. Criminal Justice Administration and Management. (3). (3126). Management philosophies for administration of criminal justice agencies; focus on organizational behavior, theories of management, planning and budgeting, administrative legal issues, and administrative problems unique to the criminal justice system.

4130. Ethical Dilemmas In Criminal Justice. (3). Legal, moral, and social implications of ethical dilemmas in criminal justice, including police use of deadly force, police discretion, victimless crimes, surveillance, enforcement of unpopular laws, use of informers, plea bargaining, judicial discretion, and capital punishment. Subcultural norms and dilemmas they present to criminal justice practitioner.

4150. Internship In Criminal Justice. (1-3). Experience in actual criminal justice setting; internship initiated by department in agency, and both department and agency supervise and direct student program. *May be repeated for maximum of 6 hours.* PREREQUISITE: senior standing and/or approval of instructor. (S/U)

4160-6160. Forensic Sciences. (3). Forensic specialities in terms of their history, scientific rationale upon which each is based, and problems that may compromise accuracy or validity; introduction to field techniques and analysis of evidence.

4170. Prevention and Deterrence to Crime. (3). Theoretical and practical strategies for crime prevention and deterrence. Social, environmental, and mechanical developments. Police, courts, and correctional elements of criminal justice system analyzed in terms of current effectiveness and future potential for crime suppression.

4180-6180. Corporate and White-Collar Crime. (3). Organizational and occupational crime compared to other types of criminality. Emphasis on causes, frequency, control, and social impact.

4190-6190. Terrorism: Social and Legal Perspective. (3). Theoretical and ideological aspects of practice of and response to international and domestic terrorism. Terrorism as crime from political, social. economic, historical, and legal perspectives.

4233. Organized Crime. (3). Nature, structure, characteristics, and investigation of syndicated crime; its impact on social and economic conditions in this country.

4235. Private and Industrial Security. (3). Role and function of private police organizations and legal restrictions on private security personnel. Facets of private security to include retail, industrial and corporate security.

4520-6520. Substantive Criminal Law. (3). (3520). Substance of the crime, including common-law sources and basic principles, types of offenses, responsibility, justification and excuse, and related areas.

4530. Principles of Evidence and Proof. (3). Rules of evidence and matters of proof affecting criminal investigation in investigatory and prosecutive stages of criminal justice. Socio-legal aspect of basic rules of evidence, including hearsay rules, impeachment, materiality and relevancy, privilege, eyewitness identification.

4531-6531. Issues in Constitutional Rights. (3). Issues in constitutional law related to criminal defendants and incarcerees; exclusionary rule and its alternatives, application of 1st Amendment to criminal law, legal status of confined persons (discipline, legal services, communications, medical aid), and liability of correctional and police officials. Civil and criminal legal techniques for protecting and vindicating constitutional rights, such as *habeas corpus* and 42 USC 1983.

4533-6533. Juvenile Delinquency: Theory and Process. (3). Theories of juvenile delinquency, gang activities, and status offenses. History, organization programs and procedures of agencies charged with control and prevention of juvenile delinquency including police, juvenile units, juvenile court, and juvenile correctional agencies.

ENGLISH

PROFESSOR
CHRISTINA MURPHY, *Chair*
Room 467, Patterson Hall

http://www.people.memphis.edu/~english

All candidates for graduation at The University of Memphis are required to complete ENGL 1101 and 1102 or their equivalents, with a grade of C or better. Before enrolling in ENGL 1101, a student must have either: (1) an ACT English score of 19 or above, or (2) an SAT verbal score of 360 or above, (3) a satisfactory score on the AAPP English Placement Essay administered by the Testing Center, or (4) completion of R&DS 0810 with a grade of C or better. Students admitted to the university through the Developmental Studies program must meet one of the following conditions before enrolling in ENGL 1101: (1) completion of R&DS 0810 with a grade of C or better, or (2) a satisfactory score on the English Placement portion of the AAPP Complete test administered by the Testing Center.

After completing ENGL 1101 and 1102 with a grade of C or better, all students must take 2201 or 2202. Freshman and sophomore sequence must be scheduled until completed. ENGL 1101 and 1102 must be taken in sequence; no credit will be allowed for ENGL 1102 until 1101 has been completed with a grade of C or better.

ENGLISH (ENGL)

0101. English as a Second Language. (1). Introduction to English Composition, concentration on composition skills; emphasis on sentence structure in written discourse. Open to non-native speakers of English only. Admission by placement only. (T grade allowed).

0102. English as a Second Language (1-2). Intermediate Composition, Practice in process of writing English expository prose, specifically paragraphs and short essays; review of grammar and sentence structure needed for academic writing skills. Open to non-native speakers of English only. Admission by placement only. (T grade allowed).

0103. English as a Second Language (1-3). Advanced Composition, practice in expository writing of paragraphs and essays with emphasis on the writing process; extensive reading in fiction used to encourage writing skill acquisition. Open to non-native speakers of English only. Admission by placement only. (T grade allowed).

NOTE: The accumulation of three credit hours from the above courses and successful completion of 0103 will be considered the equivalent of ENGL 1101. Not more than 3 hours credit may be accumulated in 0101, 0102, 0103.

1101. English Composition. (3). Practice in expository writing with emphasis on content, organization, and style (levels of usage and sentence structure) for different purposes and audiences. PREREQUISITE: R&DS 0810 with grade of C or better, or ACT English score of 19 or above, or SAT verbal score of 360 or above, or satisfactory completion of placement essay. **[G]**.

1102. English Composition and Analysis. (3). Practice in expository writing that synthesizes ideas from various readings. Includes library work and production of documented papers. PREREQUISITE: ENGL 1101 with a grade of C or better, or equivalent. **[G]**.

2201. Literary Heritage. (3). Major texts of literary heritage; modes of literary expression and cultural context; emphasis on works as products of their historical contexts and as processes shaping human consciousness. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITES: ENGL 1101 and 1102, with a grade of C or better, or their equivalent. **[G]**.

2202. Literary Heritage: African-American Emphasis. (3). Consideration of major texts of literary heritage with emphasis on African-American culture. Modes of literary expression and cultural context. Emphasis on work as products of historical contexts and as processes shaping human consciousness. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITES: ENGL 1101 and 1102, with a grade of C or better, or their equivalent. **[G]**.

ENGL 1101, 1102, and 2201 or 2202 or equivalents are prerequisites for all upper division courses in the Department of English.

3100-19. Special Topics in Literature. (1-3). Topics are varied and announced in *Schedule of Classes.*

3210. British Literature to 1798. (3). Concentration on major authors, themes, and movements.

3211. British Literature of the Medieval Period. (3).

3212. British Literature of the Sixteenth Century. (3).

3213. British Literature of the Seventeenth Century. (3).

3214. British Literature of the Restoration and Eighteenth Century. (3).

3220. British Literature since 1798. (3). Concentration on major authors, themes, and movements.

3221. British Literature of the Romantic Period. (3).

3222. British Literature of the Victorian Period. (3).

3224. British Literature of the Twentieth Century. (3).

3321. American Literature Before 1860. (3).

3322. American Literature from 1860 to World War I. (3).

3323. American Literature from World War I to Present. (3).

3411. European LIterature to Renaissance. (3). (4411).

3412. European Literature since Renaissance. (3). (4412).

3500. Practical English Grammar. (3). Extended study of the fundamentals of English grammar, sentence structure, usage, diction, punctuation, and spelling. Does not apply to the English major or minor.

3501. Modern English Grammar. (3). Introduction to current grammatical theory. Description of sounds, word structures, syntax, and semantics of English within theoretical frameworks.

3511. Introduction to Linguistics. (3). Introduction to the nature and functions of human language, to its structural principles, and to its place in culture and society. Emphasis on language diversity and change through history and contact. Discussion of language and thought, origin of language, and other topics.

3521. The American Language. (3). Changing nature and variety of American English, especially in vocabulary and usage, its range-formal-informal, written-colloquial, and standard and dialectal variations; shifting standards of usage especially reflected in dictionaries; and appropriateness dependent upon context. Language as both reflector and shaper of thought.

3601. Technical and Professional Writing. (3). Introduction to rhetoric and style of documents written by scientists, engineers, technical writers, and other professionals. Extensive practice in writing reports, proposals, manuals, and correspondence. **[W]**.

3602. Writing and Editing in the Professions. (3). Workshop in techniques of communicating effectively in business, industry, and government. Developing practical writing skills for technical publications such as reports, data analyses, and research articles. Editing practices involved in packaging and distributing professional writing in printed form.

3603. Engineering Communications. (3). Form and contexts of written and oral communications in engineering professions. Extensive practice in oral reporting, written reports, manuals, and proposals. *May not apply to the English major or minor.*

3604. Persuasive Writing. (3). (2602). Study and practice of writing essays and reports with emphasis on persuasion. Introduction to empirical and library research, application of rhetorical principles, and nature of evidence. Academic and professional writing, editing, and revision. **[C, W]**.

3605. Introduction to Creative Writing. (3). (2601). Introduction to the writing of fiction and poetry. **[W]**.

3701. Introduction to Literary Criticism. (3).

4001. Senior Honors Seminar I. (3). Intensive study of a problem in language or literature. Enrollment limited to English honors students.

4002. Senior Honors Seminar II. (3). Intensive study of a problem in language or literature. Enrollment limited to English honors students.

4100-09. Special Topics In English. (3). Topics are varied and announced in *Schedule of Classes.*

4231. Chaucer. (3).

4232. Shakespeare's Tragedies. (3).

4233. Shakespeare's Comedies and Histories. (3).

4234. Milton. (3).

4241. British Novel Through Austen. (3).

4242. British Novel Since Scott. (3).

4251. British Drama To 1642. (3).

4252. British Drama Since 1660. (3).

4321. American Literature: Major Writers Before 1860. (3).

4322. American Literature: Major Writers Since 1860. (3).

4323. Southern Literature. (3).

4341. American Novel to 1900. (3). (3341).

4342. American Novel Since 1900. (3). (3342).

4371. African-American Literature. (3).

4423. Modern British and American Poetry. (3).

4424. Modern British and American Fiction. (3).

4441. European Fiction. (3). (3441). Movements and writers important to development of continental fiction from late 18th century to present.

4451. Studies in Women and Literature. (3). Literature and criticism by and about women.

4461. The Bible as Literature. (3).

4471. Art of Biography. (3). Reading, discussion, and practice of the literary construction of lives, one's own and others'. Examines authors' artistic strategies, motives, audience, and perspectives based on gender and culture. **[W]**.

4501. History of the English Language. (3).

4511. Language and Literature. (3). How linguistics can illuminate the analysis of literature, the nature of literary language, and the linguistic options open to a writer. **[W]**.

4521. Language and Society. (3). Place of language in society and how it creates and reflects social relationships. Geographical and social dialects, male/female differences, and language of various subgroups within our culture. Intensive examination of implications of language differences. **[I]**.

4530. Practicum in ESL. (3-6). Experience in observing and teaching, peer teaching, and work with an ESL specialist. *Repeatable to a maximum of 6 hours.*

4531. Methods and Techniques in ESL. (3). Methods and techniques of teaching English as a Second Language in various settings.

4532. Skills Approaches and Assessment for ESL. (3). Approaches to evaluation and means of assessment of language skills, with special emphasis on English as a Second Language. **[C]**.

4540-4550. Special Topics in Language and Linguistics. (3). Topics are varied and announced in *Schedule of Classes.*

4601. Poetry Workshop. (3). The nature of poetry, critical approaches to the poem, and practical experience in writing and revising text. *Repeatable to maximum of 6 hours with permission of instructor.* PREREQUISITE: ENGL 3605.

4602-6602. Advanced Composition (3). Principles involved in writing clear expository prose. Emphasis on application of these principles; analysis of readings and of student's writing. **[W]**.

4603. Fiction Workshop. (3). Nature of short story and longer forms of fiction, critical approaches to fiction, and practical experience in writing and revising text. *Repeatable to maximum of 6 hours with permission of instructor.* PREREQUISITE: ENGL 3605.

4604. Forms of Poetry. (3). A study of metrics, forms, and types of poetry in English with attention to the principal traditions and critical ideas associated with the writing of verse in English.

4605. Forms of Fiction. (3). A study of how fiction works through analyzing the short story, the novella, and the novel with attention to technical developments.

4606-15. Topics In Advanced Technical Writing. (3). Theories, contexts, and practices of writing in the world of technology. Topics vary. Extensive practice in writing, editing, and preparing technical publications.

4616. The Publishing Process. (3). Steps in the publishing process from writing a manuscript to printing it, including the publishing of various genres throughout the world.

4617. Computers and Writing. (3). Impact of computers on writing process in academic, personal, creative, and professional writing. Extensive practice in using computer tools for invention, planning, drafting, revising, editing, and production. Students explore their own writing processes and effects of technology on those processes as they work through variety of individual and collaborative assignments. **[W]**.

4630. Internship in Professional Writing. (3). Experience in technical, scientific, legal, government, or business writing with a professional in the field. Dependent upon availability. PREREQUISITES: 3601 and 3602 (one of which may be completed concurrently) and permission of instructor.

4711. The Author, the Text, the Reader, and the World. (3). Methodological reflection upon theory and practice of reading linguistic, literary, and rhetorical models. PREREQUISITE: 15 hours of English. **[I]**

4900. Independent Study. (1-3). A selected topic or problem in the field of literature, language, or writing. PREREQUISITE: permission of instructor. *Repeatable when the content is different.*

4996. Honors Thesis. (3).

FOREIGN LANGUAGES AND LITERATURES

PROFESSOR
RALPH ALBANESE, JR., *Chair*
Room 375A, Dunn Mathematics & Foreign Languages Building
http://www.people. memphis.edu/~forlanglit/FLhome.html

All students who have not successfully completed first year language courses at an accredited institution of higher education and who wish to enroll in 2201 (Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Latin, Russian, Spanish) will be required to take the placement test given by the Department of Foreign Languages and Literatures. Students presenting a language to meet university admission requirements cannot receive credit for 1101 in that language.

For information about the dates and place of placement tests, contact the Department of Foreign Languages and Literatures (678-2506).

CLASSICS (CLAS)

2481. Mythology. (3). Thematic study of classical myths and their function in ancient literature. Emphasis on reading myths in ancient sources in translation. **[G]**.

3021. Scientific Terminology. (3). Qrigin and derivation of words used in medicine and the sciences; emphasis on building of scientific vocabulary.

3412. Roman Culture. (3). Study based on literary sources, of public and private life including such topics as family life, slavery, religion, medicine, law, and technology.

3413. Greek Literature in Translation. (3). Reading and analysis of masterpieces of Greek literature in translation from Homer to Lucian. Emphasis on development of literary types.

3414. Roman Literature in Translation. (3). Reading and analysis of masterpieces of Roman literature in English translation from origins to close of Silver Age. Emphasis on genres of Roman literature.

4780. Individual Studies in Classics. (1-3). Directed individual study in selected areas of Classics chosen in consultation with instructor. *Repeatable for a maximum of 6 semester hours credit by permission of chairman.* PREREQUISITE: permission of instructor.

4791. Special Studies in Classics. (1-3). Topics in classical literature and civilization. *May be repeated for maximum of 6 hours credit.* PREREQUISITE: permission of chair and instructor.

GREEK (GREK)

1101. Elementary Greek I. (3). Elements of grammar and syntax of classical and koine Greek; practice in reading and translation.

1102. Elementary Greek II. (3). Continuation of grammar and syntax of classical and koine Greek; practice in reading and translation of both classical and New Testament Greek. PREREQUISITE: GREK 1101 or equivalent.

2201. Intermediate Greek I. (3). Comprehensive review of Greek grammar; practice in reading and translation of both classical and New Testament Greek. PREREQUISITE: GREK 1102 or equivalent.

2202. Intermediate Greek II. (3). Readings in unaltered classical and New Testament Greek. Emphasis on interpretive techniques used in reading primary texts. PREREQUISITE: GREK 2201 or equivalent.

3111. Greek Historians. (3). Reading and analysis of selections from writings of Herodotus, Thucydides, and later Greek historians.

3511. Greek Tragedy. (3). Reading and analysis of selected tragedies of Aeschylus, Sophocles, and Euripides.

3911. Plato's *Apology, Crito*. (3). Reading and analysis of dialogues of Plato that give a prelude to death of Socrates.

4441. Homer. (3). Reading and analysis of selections from Homer's *Iliad and Odyssey*.

LATIN (LATN)

1101. Elementary Latin. (3). Elements of grammar; practice in Latin composition and translation.

1102. Elementary Latin. (3). Completion of elementary Latin grammar, with additional readings. PREREQUISITE: LATN 1101 or equivalent college level credit.

2201. Intermediate Latin. (3). Review of basic Latin grammar with reading selections from *The Golden Fleece* and Roman history. PREREQUISITE: LATN 1102 or the equivalent.

2202. Intermediate Latin. (3). More advanced readings from major authors. PREREQUISITE: LATN 2201 or equivalent.

3111. Roman Historians. (3). Readings and analysis of selections from Caesar, Livy, Tacitus, and Suetonius; emphasis on nature of Roman historiography.

3211. Vergil. (3). Reading and analysis of the *Aeneid*.

3912. Cicero. (3). Reading and analysis of *De Amicitia and De Senectute*.

4411. Roman Letter Writers. (3). Reading and analysis of Cicero's *Letters*.

4711. Elegy, Lyric, and Epigram. (3). Reading and analysis of selections from Catullus, Horace, Tibellus, Propertius, and Martial.

LANGUAGES AND LITERATURE (LALI)

1701-1702. Special Studies in Foreign Languages (3, 3). (LANG). Freshman-level instruction in languages not regularly offered by Department of Foreign Languages; offered if and when sufficient demand exists and instructors available. Although credit earned in these courses may be used to satisfy foreign language requirements for degrees, students should be aware of two important points: (1) foreign language requirement for degrees in College of Arts and Sciences specifies that all twelve semester hours (or six for some professional degrees) must be in same language; (2) unless demand is sufficient and unless teachers are available, the university cannot offer enough courses to enable student to meet these requirements.

2701-2702. Special Studies in Foreign Languages (3, 3). (LANG). Continuation of LANG 1701-1702. Offered provided instructor is available and there is sufficient student enrollment.

NOTE: LALI literature courses may not be used to satisfy any part of the foreign language requirement. With the exception of LALI 4890 (Literary Criticism), LALI literature courses do not apply toward a major or minor in any of the foreign languages.

NOTE: Courses in Greek and Roman literature in translation and mythology are listed under Classics.

3401. Introduction to Chinese Literature and Culture. (3). Chinese literature and culture from their origins to the present.

4010-29-6010-29. Special Topics in Foreign Literatures. (3). Topics vary and are announced in *Schedule of Classes*.

4441-6441. Dante. (3). (Same as ITAL 4441). Study of the *Vita Nuova* and the *Divina Commedia*. PREREQUISITE: ITAL 2202 or permission of instructor.

4493. Contemporary French Literature. (3). (FREN 4493). Emphasis on widely translated, well-known works by major French writers; presented in English translation.

4494. Nineteenth-Century Russian Literature in Translation. (3). Introduction to major literary works written in Russia during nineteenth century.

4780. individual Studies in Language and Literature. (1-3). Directed individual study in selected areas of language or literature chosen in consultation with instructor. *Repeatable for a maximum of 6 semester hours credit by permission of instructor.* PREREQUISITE: permission of instructor.

4890. Literary Criticism. (3). Study of the history and theory of literary criticism from Antiquity to the present as exemplified by texts selected from various European and non-European literary traditions. **[I]**.

ARABIC (ARAB)

1101. Elementary Arabic. (3). (LALI 1701002). Principles of pronunciation; everyday expressions; basic sentence patterns through oral practice, writing and reading.

1102. Elementary Arabic. (3). (LALI 1702002). Continued study of sentence patterns through oral and written practice. PREREQUISITE: ARAB 1101 or equivalent.

2201. Intermediate Arabic. (3). (LALI 2701002). Continued study of sentence patterns through oral and written practice. PREREQUISITE: ARAB 1102 or equivalent.

2202. Intermediate Arabic. (3). (LALI 2702002). Continued study of sentence patterns through oral and written practice. PREREQUISITE: ARAB 2201 or equivalent.

CHINESE (CHIN)

1101. Elementary Chinese. (3) (LALI 1701003). Principles of pronunciation; everyday expressions; basic sentence patterns through oral practice, writing and reading.

1102. Elementary Chinese. (3). (LALI 1702003). Continued study of sentence patterns through oral and written practice. PREREQUISITE: CHIN 1101 or equivalent.

2201. Intermediate Chinese. (3). (LALI 2701003). Continued study of sentence patterns through oral and written practice. PREREQUISITE: CHIN 1102 or equivalent.

2202. Intermediate Chinese. (3). (LALI 2702003). Continued study of sentence patterns through oral and written practice. PREREQUISITE: CHIN 2201 or equivalent.

3301. Conversation and Composition. (3). Conversational practice dealing with various topics on social life, traveling, business. Fundamental Chinese grammar for reading and writing. PREREQUISITE: CHIN 2202 or equivalent.

3302. Conversation and Composition. (3). Conversational practice dealing with various topics on Chinese culture, life style, business, education, history, current issues. Grammar and slang for conversation and composition. PREREQUISITE: CHIN 3301 or equivalent.

4780. Individual Studies in Chinese. (1-3). Directed individual study in selected areas of Chinese chosen in consultation with instructor. *May be repeated for a maximum of 6 hours credit.* PREREQUISITE: permission of the instructor.

FRENCH (FREN)

0701. French for Reading Knowledge I. (3). (4701). Introduction to reading French. Intensive drill in recognizing and interpreting grammatical structures, especially those peculiar to scholarly written language. Emphasis on vocabulary building and on determining the meaning of words not previously encountered. Reading of texts in French at sight or after preparation. No previous knowledge of French required. *Does not fulfill any part of undergraduate language requirement and cannot be applied toward major.* (S/U).

0702. French for Reading Knowledge II. (3). (4702). Further work in recognizing and interpreting grammatical structures. Reading of specialized scholarly texts. *Does not fulfill any part of undergraduate language requirement and cannot be applied toward major.* (S/U).

1101. Elementary French. (3). Basic skills fundamental to language proficiency and culture.

1102. Elementary French. (3). Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: FREN 1101 or equivalent.

2201. Intermediate French. (3). Comprehensive review of French grammar, exercises in writing, and readings in French literature and culture. PREREQUISITE: FREN 1102 or equivalent.

2202. Intermediate French. (3). More advanced readings. PREREQUISITE: FREN 2201 or equivalent.

3301. Conversation and Composition. (3). PREREQUISITE: FREN 2202 or equivalent.

3302. Conversation and Composition. (3). PREREQUISITE: FREN 3301 or permission of instructor.

3401. French Civilization. (3). Culture of France as reflected in its history, social institutions, art, and music. Recommended for Foreign Language, liberal arts, and International Business majors. PREREQUISITE RECQMMENDED: FREN 3301.

3411. Introduction to French Literature. (3). Selections from origins to present time. Emphasis on textual analysis. PREREQUISITE: FREN 3301.

3791. French for Commerce I. (3). Introduction to French business terminology and forms of correspondence with regular readings of business, commercial and technical publications. PREREQUISITE: FREN 3301 recommended.

3792. French for Commerce II. (3). Continuation of French 3791. PREREQUISITE: FREN 3791 or equivalent.

4301-6301. French Phonetics. (3). Theory and practice of French sounds, especially recommended for teachers of French. PREREQUISITE: three years of college French or permission of instructor.

4302-6302. Advanced Grammar. (3). Practical advanced grammar course concerned with grammatical, syntactical, and lexical usage of contemporary French.

4412-6412. Seventeenth and Eighteenth Centuries. (3). Classical theatre and critical theories: essay, nouvelle, and conte in 18th century. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.

4413-6413. Nineteenth Century French Literature. (3). Survey of literary movements and major authors with readings in all major genres. PREREQUISITE: FREN 3301. RECQMMENDED: FREN 3411.

4414-6414. Twentieth Century French Literature. (3). Survey of literary movements and major authors with readings in the novel, poetry and theater. PREREQUISITE: FREN 3301. RECQMMENDED: FREN 3411.

4780. Individual Studies in French. (1-3). Directed individual study in selected areas of French chosen in consultation with instructor. *May be repeated for a maximum of 6 hours credit.* PREREQUISITE: permission of instructor.

4791-99. Special Topics in French Literature, Language, or Civilization. (3). *May be repeated for maximum of 6 hours credit.* PREREQUISITE: permission of chair and instructor.

GERMAN (GERM)

0701. German for Reading Knowledge I. (3). (4701). Introduction to reading of German. Intensive drill in recognizing and interpreting grammatical structures, especially those peculiar to scholarly written language. Emphasis on vocabulary building and on determining meaning of words not previously encountered. Reading of texts in German at sight or after preparation. No previous knowledge of German required. *Does not fulfill any part of undergraduate language requirement and cannot be applied toward major.* (S/U).

0702. German for Reading Knowledge II. (3). (4702). Further work in recognizing and interpreting grammatical structures. Reading of specialized scholarly texts. *Does not fulfill any part of undergraduate language requirement and cannot be applied toward major.* (S/U).

1101. Elementary German. (3). Basic skills fundamental to language proficiency and culture.

1102. Elementary German. (3). Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: GERM 1101 or equivalent.

2201. Intermediate German. (3). Comprehensive review of German grammar, exercises in writing and readings in German literature and culture. PREREQUISITE: GERM 1102 or equivalent.

2202. Intermediate German. (3). More advanced readings in German literature and culture. PREREQUISITE: GERM 2201 or equivalent.

2204. Intermediate German (Business Emphasis). (3). A continuation of 2201, with emphasis on business language. PREREQUISITE: GERM 2201 or equivalent.

3301. Conversation and Composition. (3). PREREQUISITE: GERM 2202 or equivalent.

3302. Conversation and Composition. (3). PREREQUISITE: GERM 2202 or equivalent.

3411. Introduction to German Literature and Culture. (3). From beginnings to late eighteenth century. PREREQUISITE: GERM 2202 or equivalent.

3412. Introduction to German Literature and Culture II. (3). From late eighteenth century to modern period. PREREQUISITE: GERM 2202 or equivalent.

3791. German for Commerce I. (3). German business terminology and forms of correspondence; regular readings of business, commercial and technical publications. PREREQUISITE: GERM 2202 or equivalent.

3792. German for Commerce II. (3). German business terminology and correspondence. Reading of business, technical, commercial publications.

4443-6443. Major German Writers of the Twentieth Century. (3). Selected works of Hesse, Thomas Mann, Kafka, Frisch, Duerrenmatt, Brecht, and Boell. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412; or permission of instructor.

4451-6451. The German Drama. (3). Survey of dramatic literature from sixteenth to twentieth centuries; readings from Reformation, Baroque, Enlightenment. *Sturm und Drang,* Classicism, Romanticism, Realism, and modern period. PREREQUISITES: two courses from the group GERM 3301, 3411, 3412; or permission of instructor.

4465. German Narrative Prose. (3). Reading of major prose writings from Romanticism to present. Emphasis on the *Novelle*. PREREQUISITES: one course from the group GERM 3301, 3302, 3410, 3411, 3412; or permission of instructor.

4501. Applied German Linguistics. (3). Application of modern linguistic theories to learning German. PREREQUISITES: Two courses from the group GERM 3301, 3411, 3412; or permission of instructor.

4511. The German Language: Development and Structure. (3). German language in its various stages of development. PREREQUISITE: GERM 3301 or 3302; or permission of instructor.

4780. Individual Studies in German. (1-3). Directed individual study in selected areas of German chosen in consultation with instructor. *Repeatable for a maximum of 6 semester hours credit by permission of chair.* PREREQUISITE: permission of instructor.

4791-99. Special Topics in German Language or Literature. (3). *May be repeated for maximum of 6 hours credit.* PREREQUISITE: permission of chair and instructor.

HEBREW (HEBR)

1101. Elementary Hebrew. (3). (LALI 1701004). Principles of pronunciation; everyday expressions: basic sentence patterns through oral practice, writing and reading.

1102. Elementary Hebrew. (3). (LALI 1702004). Continued study of sentence patterns through oral and written practice. PREREQUISITE: HEBR 1101 or equivalent.

2201. Intermediate Hebrew. (3). (LALI 2701004). Continued study of sentence patterns through oral and written practice. PREREQUISITE: HEBR 1102 or equivalent.

2202. Intermediate Hebrew. (3). (LALI 2702004). Continued study of sentence patterns through oral and written practice. PREREQUISITE: HEBR 2201 or equivalent.

ITALIAN (ITAL)

1101. Elementary Italian I. (3). Basic skills fundamental to language proficiency and culture.

1102. Elementary Italian II. (3). Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: ITAL 1101 or equivalent.

2201. Intermediate Italian I. (3). Comprehensive review of basic grammar, exercises in conversation, writing, and cultural readings. PREREQUISITE: ITAL 1102 or equivalent.

2202. Intermediate Italian II. (3). Continued development of basic language skills through oral and written practice. PREREQUISITE: ITAL 2201 or equivalent.

3301. Conversation and Composition. (3). Development of oral proficiency and writing skills. PREREQUISITE: ITAL 2202 or equivalent.

3411. Introduction to Italian Literature. (3). Survey of major literary works from the Middle Ages to the present. PREREQUISITE: ITAL 2202 or equivalent.

4441. Dante. (3) (Same as LALI 4441). Study of the Vita Nuova and the *Divina Commedia*. PREREQUISITE: ITAL 2202 or permission of instructor.

JAPANESE (JAPN)

1101. Elementary Japanese I. (3). (LALI 1702005). Principles of pronunciation; everyday expression; basic sentence patterns through oral practice, writing and reading using the Roman alphabet.

1102. Elementary Japanese II. (3). (LALI 1702005). Continued study of sentence patterns through oral and (Romanized) written practice; the *katakana* and *hiragana* syllabaries.

2201. Intermediate Japanese I. (3). Continued study of sentence patterns through oral and written practice; introduction to the Japanese writing system with approximately 250 *kanji* and their compounds in readings and written practice.

2202. Intermediate Japanese II. (3). Continued study of sentence patterns; conversation; additional *kanji* to a total of approximately 500; readings.

RUSSIAN (RUSS)

1101. Elementary Russian I. (3). Introductory survey of Russian grammar and phonetics.

1102. Elementary Russian II. (3). Continuation of RUSS 1101. PREREQUISITE: RUSS 1101 or permission of instructor.

2201. Intermediate Russian I. (3). Comprehensive review of Russian grammar, exercises in spoken and written Russian. PREREQUISITE: RUSS 1102 or permission of instructor.

2202. Intermediate Russian II. (3). Continuation of RUSS 2201. PREREQUISITE: RUSS 2201 or permission of instructor.

3301. Russian Conversation and Composition (3). Development of advanced oral and written communication skills. PREREQUISITE: RUSS 2202 or permission of instructor.

3302. Russian Conversation and Composition (3). Continuation of RUSS 3301. PREREQUISITE: RUSS 3301 or permission of instructor.

3441. Early Nineteenth-Century Russian Literature. (3). Survey of major writers and works of the first half of the 19th century, including Pushkin and Gogol.

3442. Nineteenth-Century Russian Realism. (3). Survey of major writers and works of the last half of the 19th century, including Dostoevskii and Tolstoi.

3443. Twentieth-Century Russian Prose. (3). Survey of Russian literature since 1900, including selected writers and works of the pre-revolutionary and Soviet periods and Russian emigre literature.

3611. Survey of Russian Civilization. (3). Russia and its people; highlights of Russian civilization as revealed in the fields of literature, music, painting and architecture. *May not be used for Russian language credit.*

4309. The Art of Translating Russian. (3). PREREQUISITE: RUSS 2202 or permission of instructor

4780. Individual Studies in Russian. (1-3). Directed individual study in selected areas of Russian chosen in consultation with instructor. *Repeatable for a maximum of 6 semester hours credit by permission of chair.* PREREQUISITE: permission of instructor.

4791-99. Special Topics in Russian. (3). *May be repeated for a maximum of 6 hours credit.* PREREQUISITE: permission of chair and instructor.

SPANISH (SPAN)

1101. Elementary Spanish. (3). Basic skills fundamental to language proficiency and culture.

1102. Elementary Spanish. (3). Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: SPAN 1101 or equivalent.

1112. Intensive Elementary Spanish. (6). First year college Spanish. Skills fundamental to language proficiency and culture. Covers material of SPAN 1101 and 1102. Classroom sessions daily. *A maximum of 6 hours credit may be received for any combination of SPAN 1101, 1102, and 1112.*

2201. Intermediate Spanish. (3). Comprehensive review of Spanish grammar, exercises in writing conversation, and readings in Hispanic literature and culture. PREREQUISITE: SPAN 1102 or equivalent.

2202. Intermediate Spanish. (3). More advanced readings. PREREQUISITE: SPAN 2201 or equivalent.

2212. Intensive Intermediate Spanish. (6). Comprehensive review of Spanish grammar. Exercises in writing, conversation. Readings in Hispanic literature and culture. Covers material of SPAN 2201 and 2202. Meets every day. *A maximum of 6 hours credit may by received for any combination of SPAN 2201, 2202, and 2212.*

3301. Conversation. (3). (3300). Designed to help students develop oral proficiency. Diverse opportunities for self-expression. Not intended for students with native or near-native proficiency in Spanish. PREREQUISITE: SPAN 2202 or equivalent.

3303. Composition. (3). (3300). Designed to develop adequate writing skills. Compositions analyzed to identify and avoid frequent grammatical errors and to avoid interference from English. Not intended for students with native or near-native proficiency. PREREQUISITE: SPAN 2202 or equivalent.

3311. Intermediate Conversation. (3). (3302). Designed to develop strong conversational and listening skills. Includes wide variety of activities, exposure to different pronunciations and native conversational speed. Selected readings to help expand vocabulary. Not intended for students with native or near-native proficiency. PREREQUISITE: SPAN 3301 or permission of instructor.

3312. Advanced Conversation. (3). Further vocabulary expansion, precision in diction, and ability to express and understand non-technical subjects.

Required of majors and minors. PREREQUISITE: SPAN 3311 or permission of instructor.

3313. Advanced Composition.(3). (3300). Designed to develop strong command of written language. Emphasis on style, organization and exposition of content as opposed to grammatical analysis. PREREQUISITE: SPAN 3303 or permission of instructor.

4302-6302. Advanced Grammar. (3). Special problems in grammar; recommended for majors and minors. PREREQUISITE: 3000-level Spanish course or equivalent.

4306-6306. Applied Spanish Linguistics. (3). (4501). Current research in linguistics, psycholinguistics and sociolinguistics and their contribution to second language teaching and second-language learning.

4410-6410. Spanish Literature and Civilization. (3). (3410). Survey of literary movements and major figures with readings in literature and civilization. Required of majors. PREREQUISITE: 3312 or equivalent.

4431-6431. Contemporary Spanish Prose. (3). Spanish prose from Generation of 1898 to present. PREREQUISITES: SPAN 4410 or permission of instructor.

4432-6432. Contemporary Spanish Poetry and Drama. (3). Spanish poetry and drama from Generation of 1898 to present. PREREQUISITES: 4410 or permission of instructor.

4510-6510. Spanish American Literature and Civilization. (3). (3510). Survey of literary movements and major figures with readings in literature and civilization. Required of majors. PREREQUISITE: SPAN 3312 or equivalent.

4561-6561. Pre-Contemporary Spanish American Prose Fiction. (3). Development of Spanish American novel and short story from beginnings through 20th century. PREREQUISITE: SPAN 4510.

4562-6562. Contemporary Spanish American Prose Fiction. (3). Spanish American novel and short story of 20th century. PREREQUISITE: SPAN 4510.

4701. Spanish for Commerce I. (3). (3791). Spanish business terminology and correspondence. PREREQUISITE: any 3000-level Spanish course or permission of instructor.

4702. Spanish for Commerce II. (3). (3792). Business concepts and documents. PREREQUISITE: any 3000-level Spanish course or permission of instructor.

4780. Individual Studies in Spanish. (1-3). Directed individual study in selected areas of Spanish chosen in consultation with instructor. *Repeatable for a maximum of 6 semester hours credit by permission of chairman.* PREREQUISITE: permission of instructor.

4790-99. Special Topics in Literature and Linguistics. (3). Literary topics include medieval literature, Golden Age, 19th century literature, and Spanish American drama. *May be repeated for maximum of 6 hours credit.* PREREQUISITE: permission of instructor.

GEOGRAPHY AND PLANNING

PROFESSOR
HSIANG-TE KUNG, *Chair*
Room 107, Johnson Hall

http://lrsgis2.memphis.edu/~master/

The prerequisite for all 3000 and 4000 level course is either U of M junior standing (a minimum of 55 semester hours credit) or the permission of the instructor.

NOTE: Students eligible to repeat a course to improve a grade in GEOG 2301 or GEOG 2311 may use the grade earned in GEOG 1301 to improve a grade in either GEOG 2301 or GEOG 2311, but not both.

GEOGRAPHY (GEOG)

1001. Introduction to Environmental and Earth Science: Weather and Climate. (3). (1101). Atmospheric processes and geographic distribution of radiation, moisture, pressure, and circulation interacting to create weather systems and storms; oceanic influences, earth-sun relationships, global climate patterns; human interaction with atmosphere. PREREQUISITE: two years of high school algebra. **[G]**.

1002. Introduction to Environmental and Earth Science: Landforms. (3). (1102). Agents and processes of landform development and geographic relationships of landscapes including volcanic, fluvial, glacial, and coastal environments; soil development and vegetation associations; environmental hazards to humans; maps and aerial photo interpretation as sources of environmental information. PREREQUISITE: two years of high school algebra. **[G]**.

1003. Global Environmental Change. (3) (1103). Examination of global environmental change from interdisciplinary approach. Focus on changes in the atmosphere, lithosphere, and hydrosphere, especially those that seem to be related to human actions. Includes greenhouse-gas induced global warming, ozone depletion as related to CFCs released by people, effect of accelerated deforestation and reforestation on biosphere, and relation between human activities and soil erosion and depletion. PREREQUISITE: one introductory natural science course or permission of instructor.

1011. Introduction to Environmental and Earth Science: Weather and Climate Laboratory. (1). (1101 Lab). Laboratory exercises, observations, and experiments designed to apply scientific methods to lecture subjects. Students make observations of atmospheric phenomena and use instruments, both in lab and in field, in order to better understand what is involved in experimental problems. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: GEQG 1001. **[G]**.

1022. Introduction to Environmental and Earth Science: Landforms Laboratory. (1) (1102 Lab). Laboratory exercises, observations, and experiments designed to apply scientific methods to lecture subjects. Topographic maps and aerial photographs are major information sources for interpretation and analysis. Stereoscopes utilized for three-dimensional viewing. Stream tables, soil profiles, and landscape models used to illustrate physical processes interacting to modify earth's surface. *Two laboratory hours per week.* PREREQUISITE or COREQUISITE: GEQG 1002. **[G]**.

1301. Survey of World Regions. (3). Survey of economic, cultural and physical traits characteristic of developing and industrialized nations. **[G]**.

1401. Introduction to Cultural Geography. (3). Geographical aspects of human behavior. Focuses on distributional patterns and interactions of such cultural characteristics as language, religion, politics, and economics. **[G]**.

3200. Peoples and Cultures of the World (Same as ANTH 3200). (3). Major ethnographic areas and selected cultures of world.

3221. Principles of Conservation. (3). Development of conservation ethic and wilderness concepts, survey of environmental problems, land use, and energy and resource utilization; soil erosion and crop productivity relationships.

3401. Historical Geography of the U.S. (3). Evolution of the cultural landscapes of the United States with emphasis on the interaction of environment and people in the development of this nation. **[G]**.

3430. Economic Geography. (3). Spatial characteristics and distribution of economic activities.

3451. Introduction to Urban Planning. (3). Introduction to regional and urban planning emphasizing spatial relationships of physical, economic, and cultural phenomena necessary in planning process.

3501. Map Reading. (3). Comprehensive study of maps as geographic tools that enable user to gain knowledge of earth through map reading and map interpretation and to make intelligent use of such map information.

3514. Introduction to Geographic Information Systems and Techniques. (3). Introduction to geographic information processing and the fundamental techniques of Geographic Information Systems, Aerial Photo Interpretation, Remote Sensing, and Map Design. *Three lecture hours per week.* PREREQUISITE: GEQG 1002 AND GEQG 1022.

4111-6111. Synoptic Meteorology I. (4). Basic weather parameters and atmospheric processes in weather analysis and forecasting. *Three lecture , two laboratory hours per week.* PREREQUISITE: GEQG 1001 and 1011 or consent of instructor.

4112-6112. Synoptic Meteorology II. (4). Advanced forecasting skills and techniques and detailed specifics of weather forecasting, including severe weather and aviation forecasting. *Three lecture, two laboratory hours per week.* PREREQUISITE: GEQG 4111.

4115-6115. Dynamic Meteorology I. (3). General principles of thermodynamics, the equation of state, thermodynamic diagrams, hydrostatic equilibrium, stability, and convection, and application of these principles to weather analysis and forecasting. PREREQUISITES: PHYS 2510 and 2003 and PREREQUISITE or COREQUISITE: MATH 3391. **[C]**.

4116-6116. Dynamic Meteorology II. (3). Applications of general principles of mechanics and fluid motions to study of atmosphere. Topics include equations of motion, circulation, divergence, numerical weather prediction, kinematics of fluid flow, vorticity, and surfaces of discontinuity PREREQUISITE: GEQG 4115; PREREQUISITE or COREQUISITE: PHYS 2004/2520.

4122-6122. Environmental and Earth Science: The Soil. (3). Processes and dynamics of soil profile development. Major models of soil development examined and applied to soil genesis in Tennessee. Application of soil techniques to archaeology, planning, earth sciences, and soil conservation and erosion problems. Emphasis on field and laboratory techniques with field work in soil mapping and soil taxonomy. *Two lecture, two laboratory hours per week.*

4201-6201. Urbanization and Environment. (3). Ways man has changed natural environment by urbanization and how physical features and processes influence development and function of cities.

4211-6211. Climatology. (3). Climatic elements and methods of data analysis; applications of climatology in agriculture, health, economics, and architecture. PREREQUISITES: GEQG 1001/1011 and PHYS 2110 and 2001.

4215-6215. Physical Climatology. (3). Components of earth's energy balance, emphasis on solar radiation, heat transfer, and evapotranspiration. PREREQUISITES: GEQG 1001/1011 and PHYS 2110 and 2001.

4231-6231. Water Resources. (3). Hydrologic processes and their application to needs of cities, industry, agriculture, and recreation.

4241-6241. Biogeography. (3). Principles underlying spatial distribution of plants, including physical, biotic, and historical controls; vegetation dynamics; survey of patterns and processes of North American vegetation.

4251-6251. Environmental Issues and Natural Hazards. (3). Interrelations between human beings and natural hazards; importance of policy decisions; planet-wide climatic changes, potential changes in earth-sun relations, inadequate food production, local disasters, and nuclear contamination.

4271-6271. Park Resource Protection and Visitor Management I. (4). (INTD 4510, 3510). Concepts of geography and psychology required for resource protection and visitor management positions as park rangers in federal and state parks. Classroom instruction, readings, and applied practical exercises included. PREREQUISITE: permission of instructor.

4272-6272. Park Resource Protection and Visitor Management II. (4). (INTD 4511, 3511). Advanced content and skills involved in protecting natural resources and managing park visitor behavior in recreational areas. Includes knowledge and skill-building in natural resource law, enforcement skills, and advanced interpersonal development. PREREQ-

UISITE: GEOG 4271-6271 and permission of instructor.

4304-6304. Geography of Europe. (3). Geographic analysis of physical, cultural and economic characteristics of Europe.

4306-6306. Geography of Asia. (3). Significance of regional differences in Japan, China, and India, and brief survey of remaining areas.

4313-6313. Geography of the United States and Canada. (3). Physical, cultural, and economic characteristics of United States and Canada.

4316-6316. Geography of the South. (3). Selected regions in South; emphasis on changes and trends in cultural-physical complex.

4318-6318. Geography of American National Parks. (3). An examination of individual types of parks with regard to location, physical characteristics and use; the history and mission of the National Park Service with regard to management of the national parks past and present; implications for future public land management strategies.

4324-6324. Geography of Middle America. (3). Peoples and places of Mexico, Central America, and the Caribbean. Topics will include history of Maya and Aztec culture, cultural ecology and traditional land use, contemporary development issues, and the region's global situation.

4325-6325. Geography of South America. (3). Lands and peoples of the diverse regions of South America, folk populations, Amazonia, Andean issues; contemporary economics and resources in a developing world region.

4431-6431. Urban Geography. (3). Allocation of land for urban uses; adjustments and adaptations to existing physical phenomena; patterns, functions, and forms of specific urban land areas; and some continuous problems of urban development and growth.

4442-6442. Commercial Land Use. (3). (same as FIR 4360). Factors influencing the location pattern of commercial land uses; emphasis on location analysis of commercial real estate.

4443-6443. Transportation Planning. (3). Planning for various transportation modes and networks and impact they have on land use and contemporary development problems.

4502-6502. Computer Mapping. (3). Use of computer mapping programs as effective techniques for visual presentation of wide variety of data. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOG 3514.

4503-6503. Map Design and Production. (3). Cartographic theory and application to thematic mapping; use of computer for creation, editing, proofing, and reproduction of maps. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOG 3514.

4510-6510. Aerial Photo Interpretation. (3). (Same as GEOL 4510). Elements and steps involved in interpreting, measuring, and mapping of images appearing on aerial photographs. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOG 3514.

4511-6511. Remote Sensing of the Environment. (3). (Same as GEOL 4512). Survey of theory and application, use of color, infrared, thermal, and radar images generated from satellites for geographic, environmental, and planning purposes. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOG 4510 or consent of instructor.

4514-6514. Geographic Information Systems. (3). Role and nature of using interactive computer mapping for decision support in resource management. Structure and use of spatial databases in the decision process. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOG 3514.

4521-6521. Quantitative Methods. (3). Introduction to quantitative methods in spatial analysis. **[C]**.

4524-6524. Advanced Geographic Information Systems. (3). Advanced study of database manipulation, data interface, and cartographic modeling techniques with emphasis on customizing GIS applications and automated modeling procedures. Also includes use and manipulation of commercially available data as sources for GIS applications. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOG 4514 or consent of instructor.

4531-6531. Field Methods. (3). Basic methods of geographic analysis used in classifying, analyzing and reporting field-generated data including field mapping, sampling procedures, questionnaires and archival and public document research. *One and one-half lecture, three laboratory hours per week.*

4541. Field Studies. (1-6). Faculty-conducted field trip emphasizing study of geographic phenomena. Location will vary. Topics may include physical landscapes, land-use patterns, cross-cultural analysis, micro and regional economics, or other geographical processes. Credit hours based on length of time in field. Requires field journal and report to receive credit. *May be repeated with change in content for maximum of 6 hours credit.* PREREQUISITES: permission of instructor and completion of special registration.

4551. Urban Planning Studio. (3). Application of planning process to urban problems and preparation of plans for the urban area. PREREQUISITE: GEOG 3451 or consent of instructor.

4610-19-6610-19. Special Topics In Geography. (1-3). Topics are varied and announced in *Schedule of Classes.*

4621. Independent Study. (1-3). Student, under faculty supervision, studies in-depth particular geographic topic. *Repeatable with change in content to maximum of 3 semester hours.* PREREQUISITE: approval of instructor.

4700-6700. Geography Internship. (1-9). Experience working with agency in which geographic knowledge can be utilized. *Repeatable to maximum of 9 semester hours.* Credit allowed only after acceptance of report. PREREQUISITE: approval of instructor and chair. (S/U).

4801. Geographical Thought and Application. (3). Major concepts in environmental/earth sciences, human/cultural, and economic/urban geography. Proseminar format requires review of readings with oral and written presentations. Focus on synthesis and application of geographic concepts to contemporary research themes. PREREQUISITE: 15 semester hours in Geography with at least one course from each of the following areas: Environmental and Earth Sciences, Human Geography, and Regional Geography. **[I, W]**.

GEOLOGICAL SCIENCES

PROFESSOR
PHILI DEBOO, *Chair*
Room 402, J. M. Smith Hall

GEOLOGY (GEOL)

1101. Physical Geology. (4). Introduction to processes that form the rocks in the earth's crust; the earth's internal forces that make mountains and volcanoes; special emphasis on topics that impact the Mid-South, such as earthquakes. *Three lecture, two laboratory hours per week.* **[G]**.

1102. Historical Geology. (4). (1201). Overview of history of earth and its life as interpreted from rock and fossil record; origins of continents, mountain ranges, ocean basins and natural regions of U.S. *Three lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1101.

1103. Environmental Geology. (4). Applications of Physical Geology to understanding, evaluating and solving problems created by natural hazards and those created by humans. A study in the management, utilization and preservation of our natural regions, finite space and resources. *Three lecture and two laboratory hours per week.* PREREQUISITE: GEOL 1101. **[G]**.

3211. Invertebrate Paleontology. (4). Fossil invertebrate animals and their importance in interpretation of ancient environments, evolution, and geologic time. *Three lecture, two laboratory hours per week.* PREREQUISITES: GEOL 1101,1102. **[W]**.

3311. Minerology. (4). Structural and chemical crystallography of minerals; classification and identification of minerals. *Two lecture and four laboratory hours per week.* PREREQUISITE: GEOL 1101. COREQUISITES: CHEM 1121, 1131.

3312. Introduction to Petrology. (4). Classification, identification and genesis of igneous and metamorphic rocks in hand specimens. Optical theory of light transmission through minerals; identification of translucent minerals in oil immersion with the petrographic microscope. *Two lecture and four laboratory hours per week.* PREREQUISITE: GEOL 3311.

3512. Structural Geology. (4). Structures of the crust; geometry of folds and faults, rock deformation, criteria for recognizing structures, solution of geometrical problems. *Three lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1101, MATH 1321, or consent of instructor. **[C]**.

3712. Sedimentology and Stratigraphy. (4). Origin and classification of sedimentary rocks and mutual relationship of sedimentary rock bodies both geographically and through geologic time. Lecture emphasizes comparison of modern depositional systems with their ancient counterparts. Laboratory emphasizes hand specimen analysis and preparation of geologic maps. *Three lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1102.

3802. Introduction to Oceanography. (3). Origin, chemistry, water circulation, shoreline and deep water characteristics of oceans; its role in evolution and history of earth; marine life and its ecology.

4010-19-6010-19. Special Topics In Geological Sciences. (3). Topics vary and are announced in the *Schedule of Classes.*

4100. Petroleum Geology. (3). Application of geologic principles to search for economic accumulations of oil and gas; lab emphasis on prospect selection using subsurface techniques, lecture emphasis on depomodels and depositional systems. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOL 3712.

4202-6202. Geomorphology. (4). Description, origin and interpretation of landforms and their relationships to underlying structure and geologic history. Processes acting on earth's surface, including active tectonics; weather; mass-wasting; climate change; and fluvial, shoreline, and glacial processes. *Three lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1102.

4211-6211. Physical Hydrogeology. (3). Movement, storage and development of groundwater. Groundwater in the hydrologic cycle. Aquifer characteristics and tests. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1101.

4332-6332. Introduction to Geochemistry. (3). Geological and chemical processes that govern or control migration and distribution of elements and atomic species of earth in space and time. *Three lecture hours per week.* PREREQUISITE: GEOL 3312.

4341-6341. Aqueous Geochemistry. (3). Physical chemistry of aqueous solutions as applied to geochemical processes on earth's surface. PREREQUISITE: CHEM 1112.

4342-6342. Environmental Geochemistry. (3). Detailed discussion of geochemical reactions and processes as related to specific environmental problems. PREREQUISITE: GEOL 4341 or consent of instructor.

4351-6351. Advanced Structural Geology, (3). (4642). Analysis of crustal structure; stress in rocks, mechanical interpretation of crustal structures. PREREQUISITES: GEOL 3512, MATH 1321.

4510-6510. Aerial Photo Interpretation. (3). (Same as GEOG 4510). Elements and steps involved in interpreting, measuring and mapping images appearing on aerial photographs. *Two lecture, two laboratory hours per week.*

4512-6512. Remote Sensing of the Environment. (3). (Same as GEOG 4511). Survey of theory and application; use of color, infrared, thermal and radar images generated from satellites for geographic, geologic, environmental and planning purposes. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOL 4510.

4622. Geology Field Camp. (6). Preparation of structural and lithologic maps in prescribed geologic areas using topographic maps and aerial photographs. Instruments used are the alidade and the Brunton compass. Offered in summer school only. PREREQUISITES: GEQL 3312, 3512, and 3712. **[I]**.

4701-6701. Spring Field Trip. (1-2). Conducted field trips during spring vacation. About 30 hours of field work follow 2-4 hours of lectures. Qpen to nonmajors. Among areas which may be included are Quachita-Arbuckle-Wichita Mountains of Qklahoma; Quachita, Qzark dome and adjacent mineral districts; central and southern Appalachians; and Gulf Coastal Plain. Check *Schedule of Classes* for specific location. NQTE: *May be repeated three times when location varies. A total of no more than 8 hours credit may be earned. Dates, hours and credits to be arranged.* PREREQUISITE: consent of instructor.

4721. Investigations In Geology. (1-3). Individual or group work on topics of current interest. *May be repeated for maximum of 6 hours.* PREREQUISITE: consent of instructor.

4731. Senior Thesis. (1-3). Qriginal study on subject of geological significance to be carried on independently by student with faculty supervision. PREREQUISITE: senior standing in Geology.

GEOPHYSICS (GEOP)

4101-6101. Introduction to Geophysics. (3). (GEOL 4652). Fundamental topics: earth's ages and their thermal state, main gravity and magnetic fields; dynamic models of earth's interior, comparison of terrestrial planets. PREREQUISITES: PHYS 2111, MATH 1321.

4111-6111. Advanced Physical Geology. (3). Geology for geophysicists from advanced quantitative viewpoint; the earth as a planet; its structure; its physical and chemical environment; its materials and processes on its surface and interior; its evolution from a physical and geological viewpoint. PREREQUISITE: consent of instructor.

4201-6201. Applied Geophysics. (4). (GEOL 4632). Geophysic prospecting methods; seismic reflection and seismic refraction techniques, and electrical, magnetic, and gravity field measurements with emphasis on fundamental principles governing acquisition and interpretation of geophysical data. *Three lecture, two laboratory hours per week.* PREREQUISITE: consent of instructor.

4401-6401. Introduction to Seismology. (3). (GEOL 4440). Wave propagation in the earth. Topics include elasticity, elastic wave equation, vibration and waves, body and surface elastic waves seismic rays reflection and refraction of seismic waves, and the earthquake source. *Two lecture, two laboratory hours per week.* PREREQUISITE: MATH 4391 or consent of instructor.

4721. Seismogram Reading. (1). Introduction te seismogram interpretation of recent earthquakes recorded by the instruments of CERI and the Globa Digital Seismic Network. PREREQUISITE: consent of instructor. (S/U).

4722. Investigations In Geophysics. (1-3). (GEOL 4722). Individual or group work on topics of current interest in the broad field of geophysics. *May be repeated for maximum of 6 hours.* PREREQUISITE consent of instructor.

4931. Senior Thesis.(1-3). 0riginal study on subject of geophysical significance, to be carried on independently by student with faculty supervision. PREREQUISITE: senior standing.

HISTORY

PROFESSOR
F. JACK HURLEY, *Chair*
Room 100, Mitchell Hall

http://www.people.memphis.edu/~history

All candidates for graduation at The University of Memphis are required to complete History 2601 or 2602.

HISTORY (HIST)

1301. The Development of World Civiliza0tion I. (3). Especially recommended for freshmen. Traces forms of civilization from beginnings to 1500. **[G]**.

1302. The Development of World Civilization II. (3). Especially recommended for freshmen. Traces forms of civilization from 1500 to present. **[G]**.

2601. The United States to 1877. (3). United States from discovery to end of political reconstruction. **[G]**.

2602. The United State Since 1877. (3). United States from 1877 to present. **[G]**.

3010. Special Issues In History. (3). *May be repeated for a maximum of 9 hours when topic varies.*

3035. Technology and Culture in American His tory. (3). Interrelationship between technology and culture; emphasis on 191h and early 20th centuries.

3040. Research Tools for the Humanities. (3). Introduction to history of computing; familiarization with computers, operating systems, word processing, data base management, spreadsheets, statistical analysis, and bibliographical search; consideration of social, ethical, and legal implications of computers, emphasis on applications to humanities. NOTE: Beginning knowledge of basic statistics recommended.

3045. Quantification and History. (3). Concepts of quantification in history; survey of literature of quantitative history; practical work in quantitative methods in history. PREREQUISITE: CQMP 1200 or its equivalent or successful completion of university's computer literacy examination. **[C]**.

3121. England Before 1714. (3). Political, constitu tional, cultural, social, and economic development of England from coming of Anglo-Saxons until Hanoverian accession in 1714.

3122. England Since 1714. (3). Development of England's democratic government, considering economic, social, intellectual, diplomatic, and imperial affairs.

3211. Colonial Latin America. (3). Political, economic, social and cultural development in Latin America from pre-conquest era to 1808.

3212. The Latin American Nations. (3). Major political, economic, and social trends in Latin America since 1808. Emphasis on Argentina, Brazil, Chile, and Mexico.

3273. Islamic Civilization. (3). Survey of the development of Islamic religious, social, political, intellectual, and cultural traditions from the time of Muhammad (c. 570) through the 18th century. Geographical focus is the Middle East, India, Asia, and Africa.

3274. Modern Islamic World. (3). Survey of the Islamic World from 1800 to the present, focusing on the role of Islam in the political and social development of the Middle East, India, Asia, and Africa, as well as the emergence of Islamic communities in Europe and the Americas.

3275. History of the Jewish People. (3). History of Jewish people from antiquity to present; emphasis on their changing relationships to larger cultures in which they participated.

3290. Traditional Asia. (3). Comparative survey of civilizations in India, China, Japan, and Southeast Asia, from their beginnings through the 18th century.

3291. Modern Asia. (3). Asia from 1800 to present, focusing on Asian reactions to colonialism, and rise of modern nation states in India, Japan, China, and Southeast Asia.

3300. The Ascent to Civllization. (3). (Same as ANTH 3300). Interdisciplinary integrative examination of nature of civilization through investigation of origins of civilization and comparative study of world's earliest civilizations. PREREQUISITE: 9 hours of history or anthropology, including either HIST 1301 or ANTH 1100. **[I]**.

3301. Early Modern Europe, 1500-1800. (3).

3302. Modern Europe, 1800 to Present. (3).

3320. The Ancient World. (3). Survey of civilizations of ancient Egypt and the Near East, Greece, and Rome.

3506. Cultural and Intellectual History of Europe. (3). (4506). Topics in history of European culture and thought from late Middle Ages to twentieth century. **[W]**.

3803. American Diplomatic History. (3). Though including the 18th and 19th centunes, course concentrates on 20th. Emphasizes relationship between foreign policy and domestic forces. NQTE: *Students who have received credit for HIST 3801 or 3802 will not be allowed credit for HIST 3803.*

3811. United States Military and Naval History. (3). (4811). Developments since colonial period; emphasis on background and growth of national military and naval establishments, military and naval thought, difficulties accompanying modernization and assumption of global responsibilities, and problem of relationship between civilian and military-naval sectors in democracy.

3815. World War II. (3). Broad overview of origins, principal campaigns, and effects of World War II with some attention to domestic considerations. Topics include legacy of Great War, blitzkrieg, invasion of Europe, Pearl Harbor, Battle of Midway, defeat of Germany and Japan, and domestic impact of the war.

3817. Vietnam War in Global Perspective. (3). Traditional Vietnamese culture, its response to contact with the West and, more extensively, involvement of United States in the Indochina War.

3823. Economic History of the United States. (3). NQTE: *Students who have received credit for HIST 3821 or 3822 will not be allowed credit for HIST 3823.*

3840. United States Constitutional History. (3). Constitutional developments from colonial period to present, emphasis on English heritage, constitutional antecedents of revolutionary era, origins and growth of federal system under Constitution of 1787, and evolution of modern constitutional government in United States.

3863. Social and Intellectual History of the United States. (3). Survey of way Americans have thought about essential features of social and political order. Focus on development of and debate over central ideas of equality, freedom, and individualism that have defined the order of the common life. NQTE: *Students who have received credit for HIST 3861 or 3862 will not be allowed credit for HIST 3863.* **[G]**.

3865. History of Immigration to United States. (3). Nature and effects of immigration to United States from 1776 to present.

3900. History of Tennessee. (3). Political, economic, and social development of Tennessee from earliest times. **[G]**.

3905. History of Memphis. (3). Political, social and economic aspects of development of Memphis from foundation to present.

3920. The Old South. (3). Southern institutions pnor to outbreak of Civil War.

3930. The New South. (3). South from Civil War to present.

3940. The West. (3). Significance of frontier in development of United States from Revolutionary period to 1890.

4003. The Philosophy of History. (3). History as a distinct discipline. Thought of leading Western philosophers of history about nature of history in its two senses—history as actuality and history as thought about actuality. **[W]**.

4012. Directed Readings, Honors. (3). Under the direction of faculty member, student reads about particular topic or topics. PREREQUISITE: admission to Honors Program.

4014. Directed Readings. (1-3). Readings on particular topic in history under supervision of member of faculty.

4020-6020. Internship in History. (3-12). Supervised internships working with various governmental agencies, private foundations or businesses of interest to historians. *May be repeated for up to 12 hours credit.* PREREQUISITE: permission of department.

4022-6022. Oral History. (3). Applied history, cover ing oral history theory, research, and interviewing procedures.

4050-69-6050-69. Special Topics in History. (1-3). Intensive study of selected topics; topic announced in *Schedule of Classes.*

4126-6126. Victorian and Edwardian England. (3). Social, political, and cultural adjustments of England to experience of industrialization in 19th and early 20th centuries.

4145-6145. History of Modern Germany. (3). Germany from origins of unification movement in Napoleonic Era through Second World War.

4160-6160. Russia to 1917. (3). Russia from earliest times to 1917; emphasis on the rise of serfdom and autocracy and evolution of revolutionary movement.

4162-6162. History of the Soviet Union. (3). Detailed study of 1917 Revolution and major developments in government, economy, cultural and social life, and international affairs that followed. **[W].**

4200-6200. History of Spain. (3). Spanish institutions, culture and politics from ancient times to present.

4240-6240. History of Mexico. (3). Political, economic, social, and cultural development of Mexico from ancient times to present.

4250-6250. History of Brazil. (3). Political, economic, social, and cultural development of Brazil from early times to the present.

4260-6260. The World Since 1945. (3). Global ideological, economic and political developments since World War II. Emphasizes rising affluence of industrial free market, movement of former colonies to independence, and growth in diversity among Soviet bloc nations.

4272-6272. Modern Middle East. (3). (3271). Political, diplomatic, social and religious developments in Middle East from 1800 to present.

4273-6273. Islamic Egypt. (3). Study of the political, economic, social, and cultural development of Egypt from the Islamic conquest (640) to the present.

4281-6281. Africa South of the Sahara. (3). Emphasis on black Africa in nineteenth and twentieth centuries. Age of imperialism and impact of West on Africa, colonial policies of European powers; rise of nationalist movements; problems of newly independent nations; role of African countries in world affairs.

4282-6282. The History of North Africa. (3). Emphasis on nineteenth and twentieth centuries. Extension of European influence and control; rise of nationalist movements: role of these areas in world affairs.

4283-6283. The History of Southern Africa. (3). European colonization and impact on African people from 1652 to date in Republic of South Africa, Rhodesia, and former High Commission territories.

4292-6292. History of Modern China, 1800 to the Present. (3).

4294-6294. History of Modern Japan, 1800 to the Present. (3).

4295-6295. Intellectual History of East Asia Since 1800. (3). Evolution of modern Chinese and Japanese thought.

4320-6320. Ancient Near East. (3). From beginnings in Egypt and Mesopotamia to great empires of Assyria, Babylon, Persia.

4321-6321. The Greek Experience. (3). Politics. society and culture in ancient Greece to Alexander the Great.

4322-6322. The Roman World. (3). Hellenistic kingdoms and Roman Empire.

4361-6361. History of the Byzantine Empire. (3). Byzantine or East Roman Empire from 330 to 1453 and its influence on Slavic, Turkic, and Islamic peoples.

4371-6371. Early Middle Ages. (3). Late Roman Empire, migration period, emergence of Islamic, Byzantine, and West European cultures through period of Investiture Controversy.

4372-6372. The High Middle Ages. (3). Urban emergence, growth of feudal monarchy, foundations of modern political institutions, medieval universities, and intellectual fabric of scholasticism.

4380-6380. Renaissance Europe, 1300-1520. (3). Transition from medieval to early modern institutions in Europe; emphasis on urban growth, capitalism. emergent nationalism, international diplomacy, and humanism.

4390-6390. Europe in the Age of the Reformation. (3). Characteristic political, social, economic, intellectual, and cultural developments and religious conflicts of late fifteenth and sixteenth centuries.

4401-6401. Europe in the Age of the Baroque. (3). Political crises, development of monarchial absolutism, rise of modern science, and cultural synthesis in seventeenth century.

4440-6440. The Era of the French Revolution. (3). The Old Regime, origins and development of Enlightenment thought, and revolutionary and counter-revolutionary movements in 18th century Europe.

4453-6453. Europe, 1815-1914. (3). NOTE: *Students who have received credit for HIST 4451 or 4452 will not be allowed credit for HIST 4453.*

4461-6461. Europe, 1914-1945.(3).

4620-6620. Colonial America, to 1783. (3). Political development and economic, social and cultural institutions of English Colonies in America, including origins and conduct of American Revolution.

4630-6630. The New Nation, 1783-1815. (3).

4640-6640. Jacksonian America, 1815-1850. (3).

4670-6670. Civil War and Reconstruction, 1850-1877. (3).

4680-6680. Emergence of Modern America, 1877-1914. (3). United States from end of Reconstruction to outbreak of World War I.

4701-6701. The United States, 1914 to the Second World War. (3). United States from outbreak of World War I to World War II

4702-6702. United States from the Second World War. (3). The United States from World War II to present.

4823-6823. American Labor History. (3). Historical development of labor movement in United States; emphasis on social, economic, and political trends related to labor movement.

4824-6824. Business History. (3). Historical development of business in the United States; attention to social, economic, and political trends related to American business communities.

4831-6831. History of American Family. (3). Analysis of changes in family size and structure and relationships between family and society from colonial times to present.

4851-6851. History of Women in America. (3). History of women from discovery of America to present. **[G].**

4861-6861. Parks/People/Public Policy. (3). Comparative study of history and administration of public land areas in the United States, and of American conservation.

4863-6863. History of Childhood in America. (3). Historical consideration of children and childhood in American society from early 17th century to present. **[W].**

4871-6871. United States Urban History. (3). Development of American cities, including formation of local social, economic, and political institutions, and impact of urbanization on United States.

4881-6881. Black American History. (3). History and culture of Afrrican Americans in light of their experiences; aspects of Black American life and attitudes of dominant society within which Blacks lived; ways Black men and women shaped and nurtured their own lives, culture and history in U.S. **[G].**

4882-6882. Civil Rights Movement in the United States Since 1930. (3). Struggle for African American equality, with emphasis on key civil rights issues, events, leaders, and strategies.

4941-6941. History of the American Indian. (3). Role of Indian in American history.

4996. Honors Thesis. (3). Under direction of faculty member, and with approval of Honors Committee, student writes thesis based on research in primary and/or secondary sources. PREREQUISITE: admission to Honors Program.

INTERNATIONAL STUDIES

ASSOCIATE PROFESSOR
CLIFTON DIXON, *Coordinator*
Room 121, Clement Humanities Building

INTERNATIONAL STUDIES (INTL)

1101. Analysis of Developing Nations. (3). Interdisciplinary survey of developing nations, other societies and problems of technologically developing nations. Basic concepts and methods of social sciences employed to study processes of social change in cross-cultural comparison. NOTE: *A student may not receive credit for both INTL 1101-1102 and UNIV 1410.*

1102. The Third World: A Regional View.(3). Interdisciplinary survey of contemporary developing nations within a major world region. Regional focus on Africa, Latin America, Southeast Asia, or Indian Subcontinent.

4601. Seminar in International Relations. (3). Investigation of selected topics in international relations from interdisciplinary perspective. Individual research and presentation of major paper that integrates tools, data or concepts of two or more disciplines. PREREQUISITE: permission of International Relations advisor. **[W, I].**

4911. Internship in International Relations. (1-6). Practical experience in international organization. Students placed for some period of time with governmental or private organization to obtain practical experience in foreign policy making, problems of development, and/or cross-cultural communication. Academic credit granted upon certification of cooperating agency and acceptance by faculty of written report by student. *May be repeated for up to 6 hours credit.* PREREQUISITE: permission of Coordinator of International Relations.

4912. Directed Individual Study. (1-6). Individually directed advanced reading and/or research in special areas of interest. NOTE: *Course may be repeated for a maximum of 6 hours credit.* PREREQUISITE: permission of Coordinator of International Relations.

MATHEMATICAL SCIENCES

PROFESSOR
JEROME A. GOLDSTEIN, *Chair*
Room 373, Dunn Mathematics & Foreign Languages Building
http://www.msci.memphis.edu/

The Department of Mathematical Sciences offers general courses in mathematics, statistics and computer science for students in all departments of the university, with specially designed programs for the principal divisions of the university. Courses satisfying specific graduation requirements of the several colleges are listed in the description of the degree requirements for the specific college.

The courses MATH 1211 and 1212 provide preparatory instruction, as needed, for required courses. MATH 1211 provides preparation for MATH 1212, and MATH 1212 provides preparation for MATH 1321. For students who do not possess the level of preparation or competency to achieve success in college level courses, Academic Services and Developmental Studies provides a testing and placement program and offers special courses in arithmetic and elementary algebra (R&DS 0720, 0820, and 0821). Students must display a level of competency as found in R&DS 0821 to enter the college level courses in mathematics.

MATHEMATICS (MATH)

0990. Foundations of Geometry. (3). Axiomatic development of plane geometry; emphasis on concepts of symmetry, congruence and similarity, Pythagorean Theorem and special right triangle properties, area and volumes of special right triangle properties; area and volumes of special two- and

three-dimensional figures. NOTE: *will not count toward the 132-semester hour degree requirement for any degree.* PREREQUISITE: two units of high school algebra or R&DS 0821.

1181. Concepts of Number. (3). Introduction to logic; set theory: development and applications of numeration systems, mathematical systems and algorithms. PREREQUISITE: two units of high school algebra or R&DS 0821 **[G]**.

1182. Concepts of Algebra. (3). Algebraic structures, combinatorics, statistics, mathematical proof, problem solving. PREREQUISITE: MATH 1181. **[G]**.

1211. College Algebra. (3). Systems of equations and inequalities, mathematical induction, matrix methods, partial fractions, synthetic division, theory of equations, sequences and series. NOTE: *MATH 1211 and 1213 will not satisfy a six semester hour Mathematics requirement.* PREREQUISITE: placement test recommended but not required; two units of high school algebra or R&DS 0821.

1212. Trigonometry. (3). Circular functions; inverse circular functions, graphs of circular and inverse functions, identities, equations, angles, trigonometric functions, solution of triangles, elementary application of vectors; trigonometric form of complex numbers. NOTE: *MATH 1212 and MATH 1213 will not satisfy a six semester hour Mathematics requirement.* PREREQUISITE: placement test recommended but not required; MATH 1211.

1213. College Algebra and Trigonometry. (4). Exponents, radicals, quadratic functions, inequalities; relations and functions; inverse, exponential and logarithmic functions; solution of algebraic systems; trigonometric functions, identities, equations and graphs; angle measurements; sum, difference, half-angle and double-angle formulas; solution of triangles, laws of sines and cosines. NOTE: *MATH 1211 and 1213, or 1212 and 1213 will not satisfy a six semester hour Mathematics requirement.* PREREQUISITE: two units of high school algebra or R&DS 0821.

1312. Elementary Calculus. (3). Introduction to concepts and methods of elementary calculus of one real variable as related to rational, exponential, and logarithmic functions; nature of derivatives; differentiation; application of derivative; nature of integration: definite integral; applications of definite integral. NOTE: *Only one of the courses MATH 1312 or 1321 may be used to satisfy degree requirements.* PREREQUISITE: MATH 1211. **[G]**.

1321. Analytic Geometry and Calculus. (4). Essentials of analytic geometry of the plane; nature of derivatives; differentiation of algebraic and trigonometric functions; applications of derivatives and antiderivatives. (Placement test recommended but not required.) NOTE: *Only one of the courses MATH 1312 or 1321 may be used to satisfy degree requirements. Students may not receive credit for both MATH 1321 and 1401.* PREREQUISITE: MATH 1211 or 1213 **[G]**.

1401. Honors Calculus I. (4). Concepts of ditferential calculus with emphasis on theory; limits, continuous functions, applications of the derivative. NOTE: *Students may not receive credit for both MATH 1401 and 1321.* PREREQUISITE: permission of instructor

1402. Honors Calculus II. (4). Differential and integral calculus with emphasis on theory; anti-derivatives, definite integrals, techniques of integration, sequences, and series. NOTE: *Students may not receive credit for both MATH 1402 and 2321.* PREREQUISITES: MATH 1401 or 1321 and permission of instructor.

2000. Experiences in Mathematics. (3). Introduction to selected areas of mathematical sciences through application to modeling and solution of problems involving networks, circuits, trees, linear programming, random samples, regression, probability, inference, voting systems, game theory symmetry and tilings, geometric growth, conics, comparison of algorithms, codes and data management. PREREQUISITE: three years of high school mathematics, including two years of algebra and one year of geometry. **[G]**.

2010-2019. Special Topics in Mathematics. (1-3). Topics are varied and announced in the *Schedule of Classes.* PREREQUISITE: permission of instructor.

2321. Analytic Geometry and Calculus. (4). Differentiation, integration and analytical aspects of elementary transcendental functions; techniques of integration, limits and continuity, applications of definite integral; polar coordinates. NOTE: *Students may not receive credit for both MATH 2321 and 1402.* PREREQUISITE: MATH 1212 or 1213, and 1321.

2322. Analytic Geometry and Calculus. (4). Indeterminate forms; improper integrals; vectors and analytic geometry in 3-space; partial differentiation; multiple integrals; infinite series. PREREQUISITE MATH 2321.

2401. Honors Calculus III. (4). Multivariable calculus; vectors and matrices, partial derivative and applications, multiple integrals, line and surface integrals, Green's and Stoke's theorem. NOTE: *Students may not receive credit for both MATH 2401 and 2322.* PREREQUISITE: MATH 1402.

2581. Concepts of Geometry. (3). Introduction to idea of proof in postulational system; development of geometric relationships independent of number, including congruent triangles, similar triangles, parallelograms, and circles; applications of number in geometry including coordinate geometry, lengths areas, and volumes. PREREQUISITE: MATH 1182

2701. Discrete Structures. (3). Elementary logic; sets, relations, functions, orderings, equivalence relations, partitions: finite sets, modular arithmetic; natural numbers, mathematical induction, strings, string programs, connectedness, traversals, graph algorithms. PREREQUISITE: MATH 1321.

3221. Elementary Number Theory. (3). Divisibility properties of integers; prime numbers; congruences; Diophantine equations; quadratic residues; number theoretic functions; Fermat's theorem and Euler's generalization; applications to cryptography; quadratic reciprocity law. PREREQUISITE: MATH 3242 (formerly MATH 4241); or MATH 2701 ; or permission of instructor.

3242. Introduction to Linear Algebra. (3). (4241). Systems of linear equations, matrices, elementary row and column operations, determinants; vector spaces and subspaces; linear transformations. PREREQUISITE: MATH 2322; or MATH 2321 and MATH 2701; or permission of instructor. **[C]**.

3391. Differential Equations. (3). Ordinary differential equations including series solutions. PREREQUISITE: MATH 2322.

3402. Honors Mathematics IV. (4). (2402). Linear algebra and differential equations; vector spaces, bases, linear transformations, matrices, first and second order ordinary differential equations, systems, phase plane methods. NOTE: *Students with credit for this course cannot receive credit for MATH 3242 or 3391.* PREREQUISITE: MATH 2401.

3581. College Geometry. (3). Axiomatic systems; methods of proof; major results from plane geometry; affine, projective, elliptic, and hyperbolic geometry; applications of differential calculus. PREREQUISITE: MATH 2321.

4010-19-6010-19. Special Topics in Mathematics and Statistics. (1-3). Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: permission of instructor.

4151-6151. History of Mathematics. (3). Development of mathematics from earliest times to present; problem studies; parallel reading and class reports. PREREQUISITE: 21 hours in MATH courses including MATH 2322 and MATH 2701.

4171-6171. Special Problems In Mathematics. (13). Directed individual study in selected area of mathematics chosen in consultation with instructor. *Repeatable by permission of chair.* PREREQUISITE: permission of instructor.

4240-6240. Matrix Algebra. (3). (3241). Elementary operations, special classes of matrices, determinants, eigenvalues and eigenvectors, canonical forms, and elementary computer implementation. PREREQUISITE: knowledge of Fortran and MATH 1321 or 1312. NOTE: *Credit may not be obtained for both MATH 3242 and MATH 4240.*

4242-6242. Linear Algebra. (3). Linear transformation, polynomials, determinants, direct-sum decompositions, diagonalizable operators, rational and Jordan forms, inner product spaces, the spectral theorem. PREREQUISITE: MATH 3242.

4261-6261. Abstract Algebra. (3). Groups. homomorphisms; rings; integral domains; polynomials; fields. PREREQUISITE: MATH 3242 or permission of instructor.

4350-6350. Introduction to Real Analysis I. (3). (3111). Real number system, functions and sequences, limits, continuity, differentiation; Riemann-Stieltjes integration, series of functions. PREREQUISITES: MATH 2322 and 3242. **[W]**.

4351-6351. Introduction to Real Analysis II. (3). Integration theory; Riemann and Lebesgue integrals; partial differentiation, implicit function theorem. PREREQUISITE: MATH 4350 or permission of instructor.

4361-6361. Complex Variables. (3). Complex numbers; analytic functions; Cauchy-Riemann conditions; Taylor and Laurent series; integration. PREREQUISITE: MATH 2322.

4390-6390. Ordinary Differential Equations. (3). Existence and uniqueness, linear autonomous and linear non-autonomous systems, stability, classification of linear flows, boundary value problems, and numerical applications. PREREQUISITES: MATH 3391, 3242.

4391-6391. Partial Differential Equations I. (3). Laplace transforms; Fourier series; introduction to partial differential equations. PREREQUISITE: MATH 3391.

4392-6392. Partial Differential Equations II. (3). Methods of characteristics, Green's functions, existence and regularity of solutions of boundary value and Cauchy problems. PREREQUISITE: MATH 4391.

4402. Senior Honors Seminar. (3). In-depth study of one or more topics in mathematical sciences; emphasis on individual research and problem solving techniques; student writes and presents an Honors Thesis. PREREQUISITE: open only to senior Honors Students in mathematical sciences with permission of instructor.

4411-6411. Topology. (3). Introductory set theory; metric spaces; topological spaces; continuous functions; separation axioms; separability and countability axioms; connectedness and compactness. PREREQUISITE: MATH 4350 or 3242.

4701-6701. Mathematics for Computer Scientists. (4). Basic mathematical concepts applied to problem solving in computer science: (di)graphs, trees; enumeration; recurrence relations; induction; basic probability and distributions; integer and modular arithmetic; random number generators; state sets and transition functions, finite-state machines; boolean algebra, and elementary logic. NOTE: *Credit may not be obtained for both 2701 and 4701.* COREQUISITE: MATH 1321.

4711. Introduction to Mathematical Logic. (3). (Same as COMP 4711). Propositional logic and truth table algorithms, first order calculus: terms, formulas, sentences, models, satisfaction, truth and logical validity; proof procedures and natural deduction; completeness and incompleteness theorems; applications to artificial intelligence, computer theorem proving, and verification of computer programs. PREREQUISITES: MATH 2701 or MATH 4701 or PHIL 3621 or permission of instructor.

4721-6721. Numerical Analysis.(3). Derivation and application of computer-oriented, numerical methods for functional approximation, differentiation, quadrature, and solution of ordinary differential equations. PREREQUISITE: MATH 2321 and knowledge of some structured programming language.

4741-6741. Linear Programming Methods. (3). Theory of linear programming methods, problem formulation; convex sets; simplex and revised simplex methods; matrix games and linear programming. PREREQUISITES: MATH 4240 or 3242 and knowledge of Fortran.

4999. Investigations in Mathematics. (3). Series of seminars that studies interrelationships among diverse areas of mathematical sciences covered in undergraduate program and how they developed. Emphasis on independent work, class discussions, and student projects. PREREQUISITE senior standing in mathematical sciences. **[I]**.

STATISTICS (MATH)

1601. Statistical Reasoning. (3). Introduction to designing experiments for statistical analysis; sampling for opinion polls in sample survey; case control experiments; basic statistical design of Salk Vaccine Field Trial; importance of randomization; randomized controlled and Double blind experiments; descriptive statistics; chance models; correlation and simple linear regression; logic of hypothesis testing; tests of significance and P-values. PREREQUISITE: two years of high school algebra or R&DS 0821.

4611-6611. Basic Concepts of Statistical Methods. (3). Binomial, hypergeometric, Poisson, multinomial and normal distributions, test of hypotheses, chi-square test, t-test. F-test, etc, nonparametric tests; correlation analysis. *Credit earned for this course may not be applied toward requirements for the Mathematical Sciences major. Students who have a calculus background are encouraged to take MATH 4635 instead of this course.* PREREQUISITE: 6 hours in mathematics at level of MATH 1211 or above (except MATH 1601).

4614-6614. Applied Probability and Queueing Theory. (3). Probability and random variables, discrete and continuous probability distributions, stochastic processes, queueing theory, applications of probability and queueing theory to computer systems. NQTE: *Students may not receive credit for both MATH 4614 and MATH 4635.* PREREQUISITES: MATH 2321, 2701, and CQMP 1900 or its equivalent.

4631-6631. Probability. (3). Basic concepts in probability; probability models; applications. NQTE: *Students majoring in Mathematical Sciences may not take MATH 4631 for credit.* PREREQUISITES: 6 hours in mathematics at level of MATH 1211 or above (except MATH 1601).

4635-6635. Introduction to Probability Theory. (3). Basic probability theory, random variables, expectation, variance, covariance, moment generating functions. Binomial, hypergeometric, Poisson, geometric, negative binomial, uniform, normal, exponential, Cauchy. chi-square, t, and F distributions. Central limit theorem. Functions of a random variable. Bivariate, marginal, and conditional distributions. NOTE: *Students may not receive credit for both MATH 4614 and MATH 4635.* PREREQUISITE: MATH 2321.

4636-6636. Introduction to Statistical Theory. (3). (4613). Functions of two random variables, Gamma, beta, multinomial, and bivariate normal distributions. Bayesian estimators, Maximum likelihood and method of moments estimators. Sufficient statistics, unbiasedness, confidence intervals, and hypothesis testing. PREREQUISITE: MATH 4635. COREQUISITE: MATH 2322.

4637-6637. Statistical Methods. (3). Basic concepts of hypothesis testing; comparisons of two population means, proportions, and variances; analysis of variance; completely randomized designs, randomized block designs, Latin square designs; multiple comparisons; simple linear model and multiple regression; analysis of covariance. PREREQUISITE: MATH 4611 or 4635.

4640-6640. Introduction to Probability Models. (3). Basic concepts of discrete Markov chains; branching processes; Poisson processes; applications to modelling of population growth; applications to modelling of spread of infectious disease. PREREQUISITE: MATH 4635.

COMPUTER SCIENCE (COMP)

1200. Computer Literacy. (4). Computer and its role in modern world; history of computing and social, ethical, and legal implications of computer use; introduction to computer programming and use of programs for educational and career tasks. *Three lecture, three laboratory hours per week.* Satisfies computer literacy requirement for graduation. Credit may not be applied for degree or concentration in Computer Science. PREREQUISITES: R&DS 0821, or two units of high school algebra, or one unit of algebra and one unit of geometry

1900. Computer Programming. (4). (1000). Principles of computer programming, including style and documentation: specification, algorithmic development and coding. Coding in a specific high-level programming language and its environment, including data types, iteration and flow controls commands, subprograms, parameters, i/o. NOTE: *This course is designed for computer science majors; Non-majors should take COMP 4001. Three lecture hours, two laboratory hours per week.* PREREQUISITE: MATH 1211.

2150. Data Structures. (3). Principles of object-oriented programming and software engineering; problem solving with recursion and abstract data types, including linked lists, stacks, queues, trees, binary search trees, and graphs; basic sort and search algorithms; hashing. PREREQUISITE: COMP 1900 and MATH 1321: CQREQUISITE: MATH 2701.

3160. Introduction to File and Database Systems. (3). (4160). Concepts of files and databases; performance issues for file systems; B-trees and hashing for secondary storage; database design using E-R model; data models: hierarchical, network, relational; Ouery languages: SQL, OBE; examples of real life database systems; relational algebra. PREREQUISITE: COMP 2150 or permission of instructor.

3410. Computer Organization and Assembly Language. (3). (3420). Basic concepts in assembly language programming, including logic, comparing and branching, interrupts, macros, and procedures, arrays, program design, testing and debugging, loading and linking; combinational, arithmetic and logical circuits in ALU; memory circuits, latches, flip-flops, registers. Computer Structure: fetch-execute cycles, clocks and timing: Microprogramming and Microarchitecture: data path, timing, sequencing; cache memory organization: RISC architectures. NOTE: *Students may not receive credit for all three of the following: COMP 3230, 3420, 3410.* PREREQUISITE: COMP 1900.

4001-6001. Computer Programming. (3). (MATH 4710). Basic concepts in computer programming in BASIC and FQRTRAN, including the software development cycle, data types, interation and flow control commands, modular programming, i/o, file processing; basic skills for using operating systems (DQS, VMS), graphics, computer systems, and network navigation. NQTE: *Computer Science majors may not use this course to fulfill degree requirements.* PREREQUISITE: MATH 1211.

4002-6002. Accelerated Computer Programming. (3). Computers and computer programming. Principles of style and documentation: specification, algorithms, coding, and step-wise refinement. A Structured Language, Modularity. Recursive procedures. Programming of basic data structures including linked lists, stacks, queues, trees, and sets. Basic sort and search algorithms. Hashing. NQTE: *Computer Science majors may nor use COMP 4002 to fulfill degree requirements. Credit for either COMP 1900 or COMP 2150 precludes credit for COMP 4002.* PREREQUISITE: MATH 1321. COREQUISITE: MATH 4701 or 6701.

4003-6003. Computer Organization and Assembly Language Programming. (3). Binary signals, combinatorial and sequential logic networks, computer structure, memory, control, processing, and I/O units; instruction types and execution. Computer machine language: symbolic coding and assembly systems: design, coding, testing, tracing, and debugging. NQTE: *Computer Science majors may not use COMP 4003 to fulfill degree requirements. Credit for COMP 3410 precludes credit for COMP 4003.* PREREQUISITE: CQMP 4002.

4030-6030. Introduction to Algorithms. (3) Asymptotic behavior of programs, basic paradigms in algorithm design: greedy, divide-and-conquer, dynamic programming. Analysis of efficiency and optimality of representative algorithms, including graph, pattern matching, numerical, randomized, and approximation algorithms. Approaches to lower bound analysis. Basic parallel algorithms. PREREQUISITE COMP 2150.

4040-6040. Programming Languages. (3). (MATH 4769). Comparative features, syntax, and applicability of high-level programming languages such as FORTRAN, COBOL, PASCAL, SNQBQL, LISP, ADA, C, and FQRTH, data types, and data structures, control structures and dataflow, procedures, recursion, runtime environment, string manipulation, list processing, array processing, documentation programming style. PREREQUISITE: CQMP 2150 **[W]**.

4041-6041. Introduction to Compilers. (3). Finite state recognizers, lexical scanners, symbol tables context-free languages and pushdown automata context-free parsing methods such as recursive descent, LL(K), precedence, LR(K), SLR(K); language translation, generation and improvement of machine independent codes, inherited and synthesized attributes, syntax-directed translation schema. PREREQUISITES: COMP 3230, 4040, 4030.

4081-6081. Software Development. (3-6). Program design methodologies: formal methods, dataflow diagrams, strength and coupling measures; programmer teams, organization, and management, scheduling and estimating, walk-throughs, program libraries and documentation; organization, management and development of a large-scale software project. *May be repeated for a maximum of 6 hours.* PREREQUISITES: COMP 4040, 4030.

4242-6242. Introduction to Computer Graphics (3). Characteristics of graphics I/O devices; 2D pictures, scaling, translation, rotation, and windowing; drawing histograms, simple maps, block diagrams, and flowcharts; curved lines, precision, quantization and interpolation, plotting equations; 3D pictures, scaling, translation, rotation, and projections hidden line problem, non-Euclidean geometry, animation. PREREQUISITES: COMP 3410.

4262-6262. Programming UNIX. (3). Fundamentals of the UNIX system and environment including: file system, shell concepts and programming, editors (vi and emacs), filters (sed, awk, grep, sort), utilities (make, yacc, lex), mail facility, communication software, C programming and its UNIX interface, X window system. PREREQUISITE: COMP 2150 or permission of instructor.

4270-6270. Introduction to Operating Systems (3). Hierarchy of storage devices, I/O buffering, interrupts, channels; multiprogramming, processor and job scheduling, memory management: paging, segmentation, and virtual memory; management of asynchronous processes: interrupt procedure calls, process stateword and automatic switch instructions, semaphores, concurrency; security and recovery procedures. PREREQUISITES: COMP 3410, 4040 4030.

4310-6310. Data Communications. (3). Network structure and architecture; network topology: ISO reference model: physical layer and datalink layer; communications lines; Fourier analysis and synthesis: modualtion; transmission media; coding theory; data compression, cryptography, error detection and correction; case studies of LANs: CSMA/CD, token ring, token bus. PREREQUISITE: CQMP 2150 and CQMP 3410.

4601-6601. Models of Computation. (3). Introduction to basic models of computers as basis of understanding and analysis of programming, computation, and complexity: machine models (finite-state, stack, and Turing machines; PRAMS, interconnection networks, neural networks); logic models (grammars, recursive functions, lambda calculus, and predicate calculi). PREREQUISITE: MATH 2701 or PHIL 3621 or permission of instructor.

4711-6711. Introduction to Mathematical Logic (3). (Same as MATH 4711). Propositional logic and truth table algorithms; first order calculus, terms, formulas, sentences, models, satisfaction, truth and logical validity; proof procedures and natural deduction; completeness and incompleteness theorems; applications to artificial intelligence; computer theorem proving, and verification of computer programs. PREREQUISITES: MATH 2701 or MATH 4701 or PHIL 3621 or permission of instructor.

4720-6720. Introduction to Artificial Intelligence (3). (Same as ELEC 4720-6720). Fundamentals of programming in LISP. Central ideas of artificial intelligence, including heuristic search, problem solving slot-and-filler structures and knowledge representation. PREREQUISITE: CQMP 4040 or permission of instructor.

4730-6730. Expert Systems. (3). (Same as ELEC 4730-6730). Fundamentals of programming PROLQG, central ideas of expert system develop-

ment, including knowledge representation, control structures, tools, knowledge acquisition, and knowledge engineering. PREREQUISITES: MATH 2701 and COMP 4030 or permission of instructor.

4901-6901. Individual Studies in Computer Science. (1-3). Directed individual study of selected areas of computer science. *May be repeated by permission for a maximum of 6 hours.* PREREQUISITE: permission of instructor.

4911-6911. Internship in Computer Science. (1-6). Practical experience in computer science. Students placed for some time with governmental or private organizations. Project must be approved and supervised by department faculty. Academic credit granted upon certification of the cooperating agency and acceptance by supervising faculty of student's written report. *May be repeated for up to a total of 6 semester hours credit.* PREREQUISITE: permission of supervising faculty member. (S/U).

4990-99-6990-99. Topics in Computer Science.(1-3). Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: permission of instructor.

MICROBIOLOGY AND MOLECULAR CELL SCIENCES

PROFESSOR
S. EDWARD STEVENS, JR., *Chair*
Room 201, Life Sciences
http://www/people.memphis.edu/~microcell/mmcs.html

Effective Fall 1996, the Biology Department was reorganized into two departments: (1) Biology and (2) Microbiology and Molecular Cell Sciences (MMCS). Additional biological science courses are listed under the Biology (BIOL) departmental heading.

A new major is pending TBR review. Should it be approved in time, Fall 1998 will be the implementation and catalog validity date. Check with departmental advisor after 9/97.

Students must complete BIOL 1151, 1152, 1161 and 1162 before enrolling in any upper division MMCS course.

MICROBIOLOGY AND MOLECULAR CELL SCIENCES (MMCS)

1451. Microbiology. (3). (BIOL 1451, 1400). Microorganisms and their basic characteristics with emphasis on relationship to pathogenesis and disease prevention. Credit not acceptable for BIOL or MMCS major or minor. *Three lecture hours per week.*

1452. Microbiology Laboratory. (1). (BIOL 1452, 1400 lab). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. Credit not acceptable for BIOL or MMCS major or minor. *Two laboratory hours per week.* PREREQUISITE OR COREQUISITE: MMCS 1451.

3130. Cell Biology. (3). (BIOL). Introduction to principles of cell and molecular biology as they relate to eukaryotic cells with emphasis on functions common to most cell types. *Three lecture hours per week.* PREREQUISITE: CHEM 1132.

3500. Microbiology I: Fundamental Aspects. (3). (BIOL 3551, 3500). Qrigins, anatomy, composition, physiology, reproductive mechanisms, growth and diversity or microorganisms. *Three lecture hours per week.*

3550. Microbiology II: Human and Applied Aspects. (3). Interactions of microorganisms with each other, with higher organisms, including humans, and with abiotic systems. Symbiosis, pathogenesis, micro- to planetary-scale ecology, and biotechnology. *Three lecture hours per week.* PREREQUISITE: MMCS 3500.

3600. General Microbiology Laboratory. (2). (BIOL 3555, 3500 lab). Essential microbiological laboratory skills such as aseptic technique, microscopy, and bacterial culture and characterization. *Four laboratory hours per week.* PREREQUISITE or COREQUISITE: MMCS 3500 and CHEM 1122.

4000. Research. (1-4). Independent laboratory or field research with faculty supervision; formal paper required if taken for 3 or 4 credits. *Three to twelve laboratory hours per week. May be repeated for a maximum credit of four hours.* (S/U).

4090-99-6090-99. Special Topics in Microbiology and Molecular Cell Sciences. (1-3). Topics are varied and announced in *Schedule of Classes. May be repeated with different topics for a maximum of four hours.* PREREQUISITE: Junior standing and consent of instructor.

4150-6150. Developmental Biology. (3). (BIOL 4150, 4151). Introduction to study of developing biological systems at cellular and molecular level. *Three lecture hours per week.* PREREQUISITES: BIOL 3072 and CHEM 3312.

4200. Cell and Developmental Biology Laboratory. (2). (BIOL 4152, 4151 lab). Application of modern laboratory techniques and instrumentation to experiments in cell and developmental biology. *Four laboratory hours per week.* PREREQUISITES: BIOL 3072, MMCS 3600 and CHEM 3312.

4300. Microbial Physiology. (3). (BIOL 4430). Cell structure and function; biosynthesis, degradation and metabolic regulation; regulation of growth. *Three lecture hours per week.* PREREQUISITES: MMCS 3550 and CHEM 3312.

4325. Microbial Genetics. (3). Introduction to the principles of microbial genetics with emphasis on bacteriophage, prokaryotic and yeast genetics. Mutation, conjugation, transformation, transduction, recombination, plasmids, gene mapping and applications of genetic modifications are covered. *Three lecture hours per week.* PREREQUISITES: BIOL 3072, CHEM 1132 AND MMCS 3550.

4350-6350. Microbial Biotechnology. (3). (BIOL 3560). Principles underlying practical applications of microorganisms, including synthesis of commercial products, vaccines and antibodies, bioremediation and biomass utilization, plant biotechnology and food production. *Three lecture hours per week.* PREREQUISITES: MMCS 3550 and CHEM 3312.

4375-6375. Molecular Biology of Parasites and their Vectors. (3). Emphasis on molecular and immunological aspects of parasites of humans, companion animals and livestock. The biology, treatment and prevention of parasitic diseases will be discussed. *Three lecture hours per week.* PREREQUISITE: MMCS 3550.

4400-6400. Plant Cell and Molecular Biology. (3). The cellular and molecular basis of plant development, including plant hormones, signal transduction, regulation by light, plant-microbe interactions and plant transformation. *Three lecture hours per week.* PREREQUISITE: MMCS 3130 and BIOL 3072.

4440-6440. Pathogenic Bacteriology. (3). (BIOL). Survey of pathogenic bacteria, diseases they cause and methods of diagnosis; introduction to immunological principles and immunity. *Three lecture hours per week.* PREREQUISITES: MMCS 3550 and organic chemistry.

4445-6445. Immunology. (3). (BIOL 4445, 4444). Antigens, immunoglobulin classes, cells and cytokines of immune response, complement system, hypersensitivities, blood groups, vaccines and immunity. *Three lecture hours per week.* PREREQUISITES: MMCS 3550 and CHEM 3311.

4450-6450. Microbial Ecology. (3). (BIOL). Roles of microorganisms in the environment. Microbial processes, interactions with the environment and biota, population ecology, community ecology, and biodegradation. *Three lecture hours per week.* PREREQUISITES: MMCS 3550, 4511 and 4512, or consent of instructor.

4460-6460. Advanced General Microbiology Laboratory. (2). Application of modern laboratory techniques and instrumentation to experiments in microbial physiology, genetics, ecology and biotechnology. *Four laboratory hours per week.* PREREQUISITES: MMCS 3550 and 3600.

4465-6465. Advanced Medical Microbiology Laboratory. (2). Application of modern laboratory techniques and instrumentation to experiments in pathogenic bacteriology, immunology, virology and parasitology. *Four laboratory hours per week.* PREREQUISITES: MMCS 3550 and 3600.

4470-6470. Molecular Genetics. (4). (BIOL). Structure, functions and replication of DNA, recombination, colinearity of DNA with genetic map, mutagenesis, gene transfer, plasmids, genetic code, protein synthesis, suppression, regulation of gene expression, and genetic engineering. For students without formal training in molecular genetics. *Four lecture hours per week.* PREREQUISITES: MMCS 3500 and BIQL 3072.

4475-6475. Recombinant DNA Techniques. (3). (BIOL). Laboratory with both theory and application of recombinant DNA techniques. *Six laboratory hours per week.* PREREQUISITE: Consent of instructor and MMCS 4470 or equivalent.

4501-6501. Virology. (3). (BIOL). Introductory study of viruses and methods of cultivation, isolation and characterization. *Three lecture hours per week.* PREREQUISITE: MMCS 3550.

4503-6503. Biochemistry Laboratory I. (1). (BIOL). (Same as CHEM 4501-6501). Survey of common biochemical techniques and the properties of biological molecules. Assay of enzymes and enzyme kinetics stressed. *Three laboratory hours per week.* PREREQUISITES: CHEM 3302, or CHEM 3201 and 3301. PREREQUISITE QR COREQUISITE: MMCS 4511 or CHEM 4511.

4504-6504. Biochemistry Laboratory II. (1). (BIOL). (Same as CHEM 4502-6502). Biochemical laboratory techniques; emphasis on protein purification and characterization. *Three laboratory hours per week.* PREREQUISITES: MMCS 4511 or CHEM 4511, or consent of instructor.

4511-6511. Biochemistry 1. (3). (BIOL). (Same as CHEM 4511-6511). Chemistry of amino acids and proteins related to their properties in biochemical systems. Enzymology, including kinetics and conformation studies. Coenzymes and their functions. Chemistry of carbohydrates, lipids, and nucleotides. *Three lecture hours per week.* PREREQUISITE: CHEM 3312.

4512-6512. Biochemistry II. (3). (BIOL) (Same as CHEM 4512-6512). Metabolism of carbohydrates, amino acids and nucleotides. Biochemistry of DNA and RNA, including their relationship to biosynthesis of proteins. Metabolic control. *Three lecture hours per week.* PREREQUISITE: MMCS 4511 QR CHEM 4511.

4570. Practicum in Microbiology and Molecular Cell Sciences. (1-4). Directed extradepartmental studies in microbiology and molecular cell sciences. *A maximum of four hours credit may be applied to degree requirements.* PREREQUISITE: MMCS major and permission of department chair. (S/U).

PHILOSOPHY

PROFESSOR
NANCY D. SIMCO, *Chair*
Room 327, Clement Humanities Building
http://www.people.memphis.edu/~philos/phil.html

PHILOSOPHY (PHIL)

1101. Classical Issues In Philosophy. (3). (1111). Introduction to philosophical thought focused on emergence of philosophical inquiry in Classical period; examines influence of classical philosophical issues on science, religion and society, and their relevance to modern culture. **[G]**.

1102. Values and the Modern World. (3). Discussion of nature of value, development of traditional values in East and West, criticisms of traditional values and comparative assessment of most widely accepted value philosophies of modern world. **[G]**.

1611. Elementary Logic. (3). Introduction to formal and informal reasoning that emphasizes logic as practical method for problem solving. PREREQUI-

SITE: two units of high school algebra or one unit algebra and one unit geometry.

3001. Foundations of Western Philosophy: Classical Period. (3). Introduction to history of philosophy from 7th century B.C. through early Middle Ages structured around major themes that shaped classical period, attention to cultural and historical settings in which they arose and to which they contributed. Readings from philosophical and nonphilosophical sources. PREREQUISITES: PHIL 1101 or 1102, or permission of instructor.

3002. Foundations of Western Philosophy: Modern Period. (3). Introduction to history of philosophy from late Middle Ages through 19th century structured around major themes that shaped the modern period; attention to cultural and historical setting in which they arose and to which they contributed. Readings from philosophical and nonphilosophical sources. NQTE: While this is a continuation of PHIL 3001, it may be taken separately. PREREQUISITES: PHIL 1101 or 1102, or permission of instructor.

3411. Contemporary Moral Problems. (3). Such important contemporary moral issues as pornography and obscenity, capital punishment, abortion, human rights, "reverse discrimination," and civil disobedience. Underlying philosophical ideas for each issue considered and discussed.

3451. Existentialism. (3). Historical and comparative study of different existentialist writers and their relation to literature, religion, and psychology. Readings from such writers as Kierkegaard, Nietzsche, Jaspers, Heidegger. Sartre, and Camus.

3511. Ethics. (3). Critical analysis of classical ethical theories and their application to problems of individual and society. PREREQUISITES: PHIL 1101, 1102, or permission of instructor. **[W]**.

3512. Science, Technology and Human Values. (3). Ethical problems growing out of development of modern science and technology; of such issues as relation of science to society, dehumanization of individual, impact of technology on environment, and modern warfare. Specific content of course varies each semester.

3514. Biomedical Ethics. (3). Discussion of ethical problems raised by contemporary medical practices and biological innovations from standpoint of contemporary ethical theories including abortion, euthanasia, behavior modification, human experimentation and genetic engineering.

3621. Intermediate Logic. (3). Symbolic logic, including propositional calculus, lower functional calculus, and related topics. PREREQUISITE: PHIL 1611 or permission of instructor. **[C]**.

3662. Philosophy of Science. (3). Basic features of science. Detailed analysis of problems of scientific procedure, theory construction, and verification both in physical and social sciences. PREREQUISITES: PHIL 1611 or permission of instructor.

3671. Aesthetics. (3). Introduction to philosophical theories and assumptions concerning nature and role of art and possibility of aesthetic evaluation.

3701. The Human and the Divine. (3). Examination of one or more major religious movements with regard to their origins, doctrines, and philosophical significance. Attention to such topics as contrasting conceptions of deity, worship, and role of religion in how we think about ourselves and our roles in society.

3721. Chinese Philosophy. (3). Introduction to Chinese philosophy. Readings from primary source of Confucianism, Taoism, and Buddhism, supplemented by commentary from contemporary scholarship.

3741. African American Philosophy. (3). Philosophical investigation of social and political themes which have developed historically in African American culture such as theories of social elevation, civil disobedience, race and racism, and black feminism.

3771. Philosophy In Literature. (3). Expression of philosophical ideas in literature. Readings from philosophers, playwrights, novelists and poets.

3880. Problems In Philosophy. (3). An intensive study of selected philosophical problems. *May be repeated for up to 6 hours credit.* PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

4211-6211. Studies In Ancient Philosophy. (3). Readings from primary sources, supplemented by commentary from antiquity and modern scholarship, including Pre-Socratics, Plato, Aristotle, and Hellenistic period. *May be repeated for a maximum of 9 hours credit with permission of the Departmental Undergraduate Advisor.* PREREQUISITE: PHIL 3001 or permission of instructor.

4311-6311. Studies in Modern Philosophy. (3). Readings from major philosophers of 17th to early 19th centuries, supplemented by commentaries from modern and contemporary sources. *May be repeated for a maximum of 9 hours credit with permission of the Departmental Undergraduate Advisor.* PREREQUISITE: PHIL 3002 or permission of instructor.

4421-6421. Philosophy of Mind. (3). Major issues and positions in recent philosophy of mind. Behaviorism; reductive, non-reductive, and eliminative versions of materialism; functionalism; mental causation; phenomenal consciousness; psychoanalysis and the unconscious; computational and connectionist models of mind. PREREQUISITE: PHIL 1101, 1102, or 1611, or permission of instructor.

4422-6422. Recent Anglo American Philosophy. (3). Major developments in philosophy in England and United States from 1900 to present, reading from such philosophers as Russell, Moore, Ayer, Wittgenstein, James, Dewey, Lewis, Quine and other contemporary authors. PREREQUISITE: PHIL 3002 or 4311 or permission of instructor.

4441-6441. Recent Continental Philosophy. (3). Major figures in 20th Century European thought, such movements as phenomenology, existentialism, structuralism, critical theory, and hermeneutics. *May be repeated for a maximum of 9 hours credit with permission of the Departmental Undergraduate Advisor.*

4551-6551. Social and Political Philosophy. (3). (3351). Major philosophical theories of man and the state; emphasis on concepts of society, culture, institutions, government, law, power, authority, rights, and obligation. Selected readings. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

4632-6632. Advanced Logic. (3). Nature of axiomatic systems, techniques of formalization, and logical foundations of mathematics. PREREQUISITE: PHIL 3621 or permission of instructor.

4662-6662. Philosophy of the Social Sciences. (3). Consideration of the scientific character peculiar to social (rather than natural) sciences by virtue of their special subject matter, human beings and society. Topics such as meaning, understanding vs. explanation, rationality and the nature of social institutions. Selected readings. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

4711-6711. Philosophy of Religion. (3). (3711). Philosophical issues raised by religious experience including classical and contemporary arguments for and against existence of God, meaningfulness of religious language, and concepts of faith, evil and immortality. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

4801-20-6801-20. Special Topics In Philosophy. (3). Epistemology, metaphysics, philosophy of language, philosophy of mind, logical theory, and axiology. Area to be covered appears in *Schedule of Classes* semester it is taught. *May be repeated for maximum of 15 hours credit without changing an earlier grade if different areas are treated.* PREREQUISITE: two courses in philosophy or permission of instructor.

4891. Senior Honors Thesis. (3). Directed reading and research culminating in a Senior Thesis. Thesis topic to be selected by student with approval of thesis director before honors students in philosophy. *May be repeated in successive semesters for up to 6 hours credit.*

4994. Reading end Research. (1-3). Individual directed study in area of special interest. *May be repeated in successive semesters for up to 6 hours credit.*

PHYSICS

PROFESSOR
MICHAEL M. GARLAND, *Chair*
Room 216, Manning Hall
http://www.people.memphis.edu/~physics

The PHYS 1010-1020 sequence is recommended for students with no previous background in physics. Physics 2110 and 2120 require knowledge of trigonometry (MATH 1212 or equivalent). Physics 2510 and 2520 require knowledge of calculus (MATH 1321 or equivalent).

Physics 2510 and 2520 are required of all students in engineering curricula, strongly recommended for all majors in Physics, Chemistry, or Mathematics, and recommended for majors in Biology or Geology. Students preparing for medical, dental, or pharmacy school, and students preparing to teach science in secondary school must complete either PHYS 2510 and 2520 or PHYS 2110 and 2120 to meet professional school or state teacher licensure requirements. PHYS 2110 and 2120 are required for majors in Engineering Technology.

PHYSICS (PHYS)

1001. Introductory Laboratory. (1). (1101 lab). Laboratory experiments and techniques to accompany PHYS 1010. *Two laboratory hours per week.* PREREQUISITE or CQREQUISITE: PHYS 1010. **[G]**.

1002. Astronomy Laboratory. (1). (1102 lab). Laboratory experiments and techniques to accompany PHYS 1020. *Two laboratory hours per week.* PREREQUISITE or CQREQUISITE: PHYS 1020. **[G]**.

1010. Introductory Physics. (3). (1101). Phenomenological introduction to physics for non-technical students, providing an understanding of natural laws of motion, structure of matter, heat, sound, electromagnetics, light, atomic and nuclear physics. **NOTES:** Credit will not apply toward major or minor in the sciences, nor will it satisfy any part of science requirements in pre-professional curricula. *PHYS 1001 must be taken concurrently to satisfy the General Education requirement. Three lecture hours per week.* **[G]**.

1020. Survey of Astronomy. (3). (1102). Motions of earth and moon; apparent motion of stars and planets; orbits and properties of bodies in the solar system; stellar distances, properties, and evolution; our galaxy and others. **NOTE:** *PHYS 1002 must be taken concurrently to satisfy the General Education requirement. Three lecture hours per week.* PREREQUISITE: PHYS 1010. **[G]**.

2001. General Physics Laboratory I. (1). (2111 lab). Laboratory experiments and techniques to accompany PHYS 2110. *Two laboratory hours per week.* PREREQUISITE or CQREQUISITE: PHYS 2110.

2002. General Physics Laboratory II. (1). (2112 lab). Laboratory experiments and techniques to accompany 2120. *Two laboratory hours per week.* PREREQUISITE or CQREQUISITE: PHYS 2120.

2003. Physics for Sclance and Engineering Laboratory I. (1). (2511 lab). Laboratory experiments and techniques to accompany PHYS 2510. *Two laboratory hours per week.* PREREQUISITE or CQREQUISITE: PHYS 2510. **[G]**.

2004. Physics for Science and Engineering Laboratory II. (1). (2512 lab). Laboratory experiments and techniques to accompany 2520. *Two laboratory hours per week.* PREREQUISITE or CQREQUISITE: PHYS 2520.**[G]**.

2110. General Physics. (3). (2111). Mechanics, heat, and sound. This course is recommended for students in pre-medical programs. NQTE: For first-time enrollees, PHYS 2001 must be taken concurrently. *Three lecture hours per week.* PREREQUISITE: MATH 1212 or equivalent.

2120. General Physics. (3). (2112). Continuation of PHYS 2110. Includes magnetism, electricity, light, and modern physics. Recommended for students in pre-medical programs. NQTE: For first-time enrollees, PHYS 2002 must be taken concurrently. *Three lecture hours per week.* PREREQUISITE: PHYS 2110.

2510. Physics for Science and Engineering, (3). (2511). Treatment of mechanics, heat, and sound, using methods of calculus. NOTE: For first-time enrollees, PHYS 2003 must be taken concurrently. *Three lecture hours per week.* PREREQUISITE: MATH 1321. **[G]**.

2520. Physics for Science and Engineering (3). (2512). Continuation of PHYS 2510. Treatment of electromagnetism, optics, atomic and nuclear physics, using methods of calculus. NOTE: For first-time enrollees, PHYS 2004 must be taken concurrently. *Three lecture hours per week.* PREREQUISITE: PHYS 2510. **[G]**.

3010. Introduction to Modern Physics. (3). Principles of relativity, quantum mechanics and atomic physics; selected topics in solid state, nuclear, and molecular physics. *Three lecture hours per week.* PREREQUISITE: PHYS 2004/2520. **[C]**

3011. Theoretical Physics. (3). (4810). Special mathematical techniques in solution of physical problems. Emphasis on vector calculus, boundary value problems, eigen-value problems, and Fourier series. *Three lecture hours per week.* PREREQUISITE: PHYS 2004/2520. **[C]**

3012. Theoretical Physics. (3). Continuation of PHYS 3011 covering complex variables, partial differential equations and special functions of physics. *Three lecture hours per week.* PREREQUISITE: PHYS 3011.

3111. Mechanics. (3). Advanced classical mechanics; includes statistics, dynamics of particles, rigid bodies, fluid flow, work, energy, momentum, force fields, and harmonic motion. *Three lecture hours per week.* PREREQUISITE: PHYS 2004/2520, MATH 3391.

3112. Mechanics. (3). Continuation of PHYS 3111. *Three lecture hours per week.* PREREQUISITE: PHYS 3111.

3211. Electricity and Magnetism. (3). Electromagnetic fields and waves, including such topics as dielectrics, induced electromotive force, magnetic energy, magnetic materials, Maxwell's equations, and reflection and refraction. *Three lecture hours per week.* PREREQUISITE: PHYS 2004/2520. MATH 3391.

3212. Electricity and Magnetism. (3). Continuation of PHYS 3211. *Three lecture hours per week.* PREREQUISITE: PHYS 3211.

3410. Environmental Physics. (3). Application of gas laws, transport laws, and heat transfer in environmental processes. Also includes environmental radiation (solar and terrestrial), energy system of atmosphere and hydrosphere, and energy resources and their impact upon environment. *Three lecture hours per week.* PREREQUISITE: PHYS 2510/2003 and 2520/2004.

3510. Electronics. (4). Theory and application of electronic devices; emphasis on scientific instrumentation. Laboratory oriented course including basic semiconductors, integrated circuits, and microprocessors. *Three lecture, three laboratory hours per week.* PREREQUISITE: PHYS 2004/2520 or 2002/2120 or equivalent.

3610. Experimental Techniques. (1). Introduction to independent experimentation and data analysis. Includes experiments in mechanics, electricity and magnetism, optics and modern physics. *Three laboratory hours per week.* PREREQUISITE: PHYS 2004, 2520.

3611. Experimental Techniques. (1). Continuation of PHYS 3610. *Three laboratory hours per week.*

3720. Intelligent Systems—Human and Machine. (3). Intelligence and artificial intelligence, the brain, the computer, limits of computation, knowledge representation, deductive and inductive reasoning, problem solving and theorem proving, learning, language, and communications, expert systems, vision, machine vision, connectionist models. PREREQUISITES: MATH 1321 or 2701, and programming experience in some high level computer language.

4000-09-6000-09. Special Topics in Physics. (3). Selected topics of current interest in physics not otherwise included in the curriculum. *Three lecture hours or equivalent laboratory hours per week.* PREREQUISITE: permission of instructor.

4021. Applied Radiation Physics. (3). Applied radiation and radioactivity. Includes types of radiation, radiation measurement interaction with matter, and biological effects. Radiation safety aspects emphasized. *Three lecture hours per week.* PREREQUISITE: PHYS 2002/2120 or 2004/2520 and MATH 1321.

4040. Medical Physics. (3). Physics of sensory, respiratory, and circulatory systems; physical basis of radiology and nuclear medicine. *Three lecture hours per week.* PREREQUISITE: PHYS 2002/2120 or 2004/2520, and college level course in physiology.

4051-6051. Astrophysics. (3). Application of radiation laws to interpretation of stellar structure. Introduction to radiative transfer in atmospheres. Spectral and luminosity classification of stars. Stellar populations and evolution. *Three lecture hours per week.* PREREQUISITE: PHYS 2004, 2520. PHYS 3010 is recommended.

4110-6110. Nuclear Physics. (3). Properties of atomic nuclei, radioactive transitions, alpha, beta, and gamma decay. Binding energy, nuclear forces and nuclear models. *Three lecture hours per week.* PREREQUISITE: PHYS 2004, 2520. PHYS 3010 is recommended.

4211-6211. Optics. (3). Brief review of geometrical optics; concentration on wave optics. Includes polarization phenomena, interference, diffraction, coherence, holography, and scattering. *Three lecture hours per week.* PREREQUISITE: PHYS 3211 or equivalent.

4410-6410. Introduction to Ouantum Theory. (3). Experimental basis of quantum theory; development of Schrodinger equation and its solution of simple systems; selected applications in atomic and molecular structure. *Three lecture hours per week.* PREREQUISITE: PHYS 3111, 3211 or equivalent.

4510-6510. Thermodynamics. (3). Mathematical treatment of thermodynamics, including such topics as work, energy, enthalpy, entropy, reversible and irreversible processes, equilibria, specific heats, and phase transitions. *Three lecture hours per week.* PREREQUISITE: PHYS 2004/2520, MATH 3391. **[W]**.

4610-6610. Solid State Physics.(3). Such topics as lattice vibrations, specific heats, electrical and thermal conductors in solids, magnetism. *Three lecture hours per week.* PREREQUISITE: PHYS 3010 or equivalent. **[I]**.

4910. Seminar. (1). Special projects, reports and investigation of current literature and research. *May be repeated for maximum of 2 semester hours credit.* PREREQUISITE: permission of instructor. (S/U).

4990. Research in Physics. (1-4). Collaboration with faculty member on problem of mutual interest. *Two to eight laboratory or equivalent hours per week. May be repeated for maximum of 4 hours credit.* PREREQUISITE: PHYS 3010 and permission of instructor. Students expected to complete prospectus in collaboration with faculty member before registering.

POLITICAL SCIENCE

ASSOCIATE PROFESSOR
JOY A. CLAY, *Chair*
Room 427, Clement Humanities Building
http://www.people.memphis.edu/~polisci/hpage.html

The political science areas of study are indicated by the second digit of the course number: General 1, American Government and Public Law 2, Comparative Government 3, Political Theory 4, International Relations 5, Public Administration 6, and Special 7 and 8.

The prerequisite for all 3000 and 4000 level courses is either junior standing or the permission of the instructor.

The use of a computer for instruction may be a component of courses offered in political science. However, no computer competence will be assumed unless specified in the course description.

POLITICAL SCIENCE (POLS)

1100. American Government. (3). (2211). Development, structure, and processes of American system of government, including framing principles of U.S. Constitution and Bill of Rights; structure and roles of President, Congress, and Supreme Court, and citizen participation in governing. **[G]**.

1101. Introduction to Ancient Political Thought. (3). Inquiry into fundamental questions of ancient political thought, such as: Who should rule? What is justice? What is a good political order? What are the duties of citizens? What is the foundation of morality? **[G]**.

1102. Introduction to Modern Political Thought. (3). Inquiry into fundamental questions of modern political thought, such as origin of political society, proper rights of citizens, legitimate purposes of government, meaning of justice and good society. **[G]**.

2301. Comparative Politics. (3). Comparison of institutions, issues, processes and policies in a variety of political systems ranging from European to Asian or African countries. **[G]**.

2501. International Relations.(3). Consideration of all major forms of political interaction (conflict competition, and cooperation) between and among global actors in world arena. **[G]**.

3100. Political Inquiry. (3). Introduction to major approaches used in study of political science, major theoretic movements in social science and social theory reviewed. Introduction to principles of social research emphasizing movement from theory to hypothesis formation to methods of testing.

3102. Religion and Politics. (3). Survey of role of religion and religious belief in politics. Emphasizes role of religious institutions in international arena and national politics and effects of religion on behavior and political beliefs.

3211. State and Local Governments. (3). Role of state governments in Federal System, political institutions, elections; organization, functions, and problems of state government; emphasis on Tennessee government.

3213. Introduction to the Study of Public Policy. (3). Public policy formulation process and some of the major substantive areas of policy concern in America. Emphasis on framework for identifying and analyzing substance of public problems, policy making, and policy administration.

3216. Political Parties end Elections. (3). Political parties and elections in the American political system; emphasis on party organization and activities, campaign strategies and techniques, voting behavior, and two-party system.

3217. The Political Media. (3). Interactions between the political world and the commercial media, emphasizing the variety of methods used by political elites to influence political perceptions.

3302. Western European Government and Politics. (3). Comparative study of selected political systems of Western European States.

3304. African Politics. (3). Comparative study of politics in Africa. Emphasis on current problems, with attention to historical, political, and socioeconomic dimensions.

3306. Latin American Government and Politics. (3). Forms of organization, functions and operations of government in Latin America. Emphasis on development of political institutions and present day trends.

3309. Government and Politics of Middle East.(3). Analysis of organization and functions of governments in area dominated by tenets of Islam, including examination of origin and development of Arab-Israeli conflict.

3401. Legal/Political Thought: Classical. (3). Question of justice and its relation to law and politics. Emphasizes confrontation between classical and modern views.

3402. Legal/Political Thought: Modern. (3). Question of justice and its relation to law and politics. Emphasizes confrontation between early and recent modernity.

3405. Introduction to Law and Jurisprudence.(3). Sources, functions, and processes of law.

3505. International Organizations. (3). Theories and concepts of organization of international policy. focused on the institutions, both formal and informal, through which much international interaction occurs.

3506. American Foreign Policy. (3). Domestic sources, implementation, and content of U.S. foreign policy.

3508. American National Security Policies. (3). Institutions, organizations, and policies charged with maintenance of peace and security; issues, problems, and paradoxes underlying current national security policies; arms-control proposals and objectives; political and ethical dilemmas caused by nuclear strategies and desire to avoid nuclear war.

3601. Public Administration. (3). Concepts and practices of organization and management in executive departments, national, state, and local; analysis of bureaucracy, administrative theory, budgeting. personnel, and administrative leadership. **[W]**

3700-09. Special Topics in Contemporary Politics. (3). Topics of contemporary significance in politics.

4101-6101. Political Statistics. (3). Introduction to analysis of quantitative data, and statistical hypothesis testing in the fields of political science and public and health administration. PREREQUISITE: POLS 3100. **[C]**.

4200-6200. Environmental Law, Policy and Regulation. (3). Survey of the principal federal laws, policies and regulations concerning environmental use and protection.

4207-6207. Health Politics and Policy. (3). Introduction to the political, economic, and social forces affecting the health care system in the United States. Emphasis on the development and comparison of health policies within the context of the stages of American policy making.

4208-6208. Mental Health Policy and Law. (3). Mental health systems, including voluntary and involuntary hospitalization, incompetency and guardianship, and mental health issues in criminal process; legal and policy concerns for mental health professionals, including regulation, malpractice, informed consent, and record confidentiality.

4209-6209. Aging Policy and Law. (3). Social control and social justice considerations in such policy areas of protective services, Social Security, Medicare and Medicaid, long-term care, age discrimination, and death with dignity.

4210-6210. Constitutional Principles in Loss of Liberty. (2). Constitutional law principles associated with loss of liberty for such populations as the homeless, vagrants, criminals, alcoholics, addicts, mentally ill, and children.

4211-6211. Constitutional Law: National Powers. (3). Relationships and controls of three branches and nature of division of power between nation and states; emphasis on role of Supreme Court as arbiter in constitutional system. **[W]**.

4212-6212. Constitutional Law: The Origins and Evolution of Civil Liberties in the United States. (3). Background, role, and legitimate extent of civil rights and liberties in the United States. **[G].**

4216-6216. Interest Groups in American Politics. (3). Role and impact of interest groups within American political system, including group theory, tactics, and group relationships with various governmental institutions.

4217-6217. The Legislative Process. (3). Origins, organization, functions, and activities of the U.S. Congress.

4219-6219. The American Presidency. (3). Contemporary American presidency, including: Constitutional roots for growth of presidential power; roles of persuasion, reputation, and prestige in shaping foreign and domestic policy; presidential elections; and, conflicts between executive, legislative, and judicial branches.

4220-6220. The Judicial Process. (3). Judicial selection, civil and criminal trial procedure, organization of state and federal courts, U.S. Supreme Court decision making process and issues surrounding judicial review.

4222-6222. Urban Politics. (3). Roles and processes of politics and governance in urban America in contest of global, social, and economic influences on cities and suburbs.

4221-6221. Urban Administration. (3). Politics, administration, and public policy in urban context. Focus on administrative aspects of selected governmental policy-making processes; interrelationships of governments at various levels; urban challenges facing modern public administrators.

4224-6224. Urban Problems. (3). Selected problems in urban administration, politics, and policies.

4226. Introduction to Nonprofit Organizations. (3). Critical understanding of historical development and impact of public sector, dynamic environment of nonprofit organization and current issues of importance to nonprofit decision makers.

4230-6230. Legislative Internship. (3-12). Supervised internship working with Tennessee General Assembly or other legislative bodies on current legislative programs. Seminar sessions to discuss and analyze problems with which interns are working. *May be repeated for total of 12 credits.* (S/U). PREREQUISITE: permission of department.

4231. Administrative Internship. (3-12). Supervised internship working with administrative branches of national, state, or local governments. Seminar sessions to discuss and analyze problems with which interns are working. *May be repeated for total of 12 credits.* PREREQUISITE: permission of department

4305-6305. Post-Soviet Governments and Politics. (3). Analysis of institutions, issues, processes and domestic policies of states comprising the former Soviet territory, with special emphasis on Russia ane Ukraine.

4307-6307. Government and Politics of Communist China. (3). Institutions of government, political process, political elites, political groups and political socialization in Communist China.

4399. Research and Studies Abroad. (1-6). Supervised field research and studies in selected foreign countries. *May be repeated up to 6 hours.* PREREQUISITE: permission of the department.

4401-6401. Modern Political Ideologies. (3). Major ideologies affecting modern politics. Includes ideologies of democracy, communism, and facism as well as capitalism and socialism, racism, and nationalism, and ideologies of developing or "third" and "fourth world" nations.

4405-6405. Origin and Development of American Political Thought. (3). Origin and development ol political thought in United States from colonial to present time; emphasis on relation between political thought and political institutions and practices. **[G]**.

4406. Strategies in Politics. (3). Study of politics and political strategy through use of social choice and game theories. PREREQUISITES: 15 hours of political science courses, including POLS 3100. **[C, I]**

4415. African-American Political Thought to 1900. (3). Thought of representative African-Americans upon fundamental questions of justice, right, persuasion, power and accommodation prior to the twentieth century.

4416. African-American Political Thought from 1900. (3). (4414) Thought of representative African-Americans upon fundamental questions of justice, right, persuasion, power and accommodation in the twentieth century.

4501-6501. Contemporary Problems in International Relations. (3). Studies or problems in area of world politics. *May be repeated for maximum of 6 hours credit with permission of instructor.* **[W]**.

4502-6502. Post-Soviet Foreign Policies. (3). Basic concepts and methods of analyzing the international relations and foreign policies of postSoviet territory, with special emphasis on Russia and Ukraine.

4504-6504. International Law. (3). Nature, scope, duties, rights, and evolutionary trends of international law.

4506-6506. Problems of American Foreign Policy. (3). Studies or problems of American foreign policy. *May be repeated for a maximum 6 credit hours with permission of instructor.*

4508-6508. Theories and Concepts in International Relations. (3). Theoretical approaches to study of international politics. Consideration of various schools of thought, methods, and substantive literatures.

4510-6510. International Political Economy. (3). Consideration of manner in which political processes affect and are affected by economic processes at global level.

4601-6601. Political Psychology. (3). Impact of psychological dynamics and states, including socialization, cognition, attitude, and motivation on political outcomes such as voting behavior, ethnocentrism, and decision making. Emphasis given to application of social psychological concepts and theories as well as to experimental methods.

4701. Policy Perspectives. (3). Senior capstone seminar requiring students to analyze and solve series of problems in public policy. Students draw upon each subfield of discipline and utilize variety of skills and methods in addressing issues of domestic, foreign and comparative policy. PREREQUISITE: 15 hours of political science courses. **[I, W]**.

4702. Independent Study. (1-3). Independent investigation of research problem or directed reading in selected area of political science under tutorial supervision of member of political science faculty. *May be repeated for maximum of 6 hours credit.* PREREQUISITE: permission of chairman.

4710-19-6710-19. Special Topics in Political Science.(3). Intensive study of selected topics in political science.

OPEN LEARNING FIRE SERVICES PROGRAM (OLFSP)

Admission to POLS 3610, 3611, 3612, 3613, 3614, and 3615 is restricted to students seeking the Bachelor of Professional Studies degree in Fire Administration or Fire Prevention Technology through the University College.

3610. Personnel Management for the Fire Service. (3). Personnel practices and management procedures. Included are manpower planning, labor relations recruitment, selection, testing, performance appraisals, classification, motivation, politics, and management.

3611. Disaster and Fire Defense Planning (3). Concepts and principles of community risk assessment, regional and cooperative procedures and plans, relationship of structural, climatic and topographical variables to group fires, conflagrations, and natural disasters, pre- and post-occurrence factors, communications, planning, organizing, coordination, command and logistics.

3612. Fire Prevention Organization and Management. (3). Examines and evaluates techniques, procedures, programs and agencies involved with fire prevention. Includes public and private fire prevention functions, licenses, permits, zoning, legal aspects, inspection, investigations, planning, arson, and incendiary analysis.

3613. Advanced Fire Administration. (3). Overview of organization and management in modern fire service. Includes management of equipment and personnel, fire department functions, planning, resource development, labor relations.

3614. Political and Legal Foundations of Fire Protection. (3). Legal basis for police power of government related to public safety. Legal limitations and responsibility. Liability of fire prevention organizations and personnel. Review of judicial decisions. **[W]**.

3615. The Community and The Fire Threat. (3). Sociological, economic and political characteristics of communities and their influence on fire problem. How to study community profiles and structures with consideration of economic, geographic, and sociological variables of fire threat. Examination of functional basis of community, diverse social roles of community agencies, and study of fire services as complex organization in community.

PSYCHOLOGY

PROFESSOR
ANDREW MEYERS, *Chair*
Room 202, Psychology Building
http://www.psyc.memphis.edu/psych.htm

PSYC 1101 or 1102 is prerequisite for all other courses in the Department of Psychology except 2201; both 1101 and 1102 are required of Psychology majors.

PSYCHOLOGY(PSYC)

1101. General Psychology I. (3). Introduction to social aspects of psychology as a science of behavior. Topics include: personality, emotion, abnormal behavior, treatment of psychological disorders, social and developmental psychology, psychological testing and applied psychology. Honors sections of this course are frequently available. **[G]**.

1102. General Psychology II. (3). Introduction to the biological aspects of psychology as a science of behavior. Areas of study include learning, sensation and perception, physiological and comparative psychology and psycho-pharmacology. Honors sections of this course are frequently available.

2201. Deviance: Its Role in History and Culture. (3). Introduction to concept of deviance from prehistory to present. Emphasis on vilification and glorification of deviant behavior according to time, place and customs. **[G]**.

3001. Psychological Statistics. (4). (2301). Introduction to use of statistics in psychology, with emphasis on elementary theory of measurement and computation. Topics include measures of central tendency and variability, tests of significance, correlation procedures, and an introduction to multivariate analyses, analysis of variance, and nonparametric procedures. *Three lecture, two laboratory hours per week.* **[C]**.

3002. Introduction to Psychological Research. (4). (2302). Survey of logical and methodological considerations common to all research and an overview of the range of observation, measurement and laboratory procedures employed, and presentations of their own research by various members of the faculty. *Three lecture, two laboratory hours per week.* PREREQUISITE: PSYC 3001. **[W]**.

3101. Psychology of Personality. (3). Introduction to development and functioning of normal person. Variety of representative theoretical orientations examined; emphasis on psychoanalytic theories and other 20th century theoretical viewpoints.

3102. Abnormal Psychology. (3). Basic concepts of psychopathology with emphasis on the development of behavior deviations, description of various neurotic and psychotic reactions, and an introduction to methods of psychotherapy.

3103. Child Psychology. (3). Patterns of cognitive, interpersonal, and behavioral development from birth through early adolescence. Psychological effects of genetic, organic and environmental influences as the child matures.

3104. Adult Psychology. (3). Patterns of cognitive, interpersonal and behavioral development from late adolescence to old age. Theoretical and empirical literature pertaining to such topics as marital and vocational choices, parenting, the midlife crises, and death.

3106. Social Psychology. (3). (3302). Analysis of behavior and experience of individuals in group settings, examining such topics as leadership, social influence, and intergroup and intragroup relations.

3303. Thinking and Cognitive Processes.(3). Overview of fields of cognitive psychology and cognitive science, including perception and attention, short and long-term memory, language, problem solving, reasoning, and decision making.

3304. Perceptual Psychology. (3). (4203). Introduction to empirical and theoretical issues in perception. Emphasis on classical and contemporary issues and approaches to perception pertaining to how information from environment is transformed, organized, represented and used by the perceiver in adapting to physical world.

3305. Learning and Memory. (3). (4204). Survey and analysis of basic processes involved in acquisition and retention of new behaviors and alteration of existing behaviors in animals and humans. Examination of central theoretical concepts and issues in learning.

3306. Physiological Psychology. (3). (4201). Survey of physiological processes underlying sensation, perception, motivation and emotion, motor systems, unlearned and learned behavior patterns, memory and other psychological functions.

3307. Animal Behavior. (3). (4202). Synthesis of comparative psychological and ethological approaches to study of animal behavior. Such topics as behavior genetics, species specific behaviors, behavior as a basis for phyletic classification, and major behavioral dimensions related to phylogenesis.

3501. Behavior and Environmental Survival. (3). Role that techniques and content of behavior science has in helping address environmental problems facing mankind.

3502. Environmental Behavior Modification. (3). Application of behavioral-change techniques for purpose of environmental preservation. Emphasis upon behavior-analysis approach to assessment and modification of behavior. Examination of this and other approaches to problems such as resource conservation, pollution, and population.

3505. Psychological Tests and Measurement. (3). Introduction to psychometric concepts, statistics, principles, and practices of test and scale construction, evaluation, use, and interpretation.

3506. Human Sexuality. (3). (3105). Survey of existing knowledge of human sexual behavior, including physiological, anatomical, psychological and cultural components. Focuses primarily on normative sexual functioning; such topics as sexual deviation, sexual dysfunctions, and types of treatment are also considered. PREREQUISITES: PSYC 1101 and 1102.

3507. Alcohol, Drugs and Behavior. (3). Survey of major drugs of abuse, their mode of action, and their behavioral effects, both acute and chronic. Major theories of etiology and maintenance of drug abuse and review of prominent strategies for prevention, intervention and treatment.

3508. Industrial and Organizational Psychology. (3). (3301). Application of psychological concepts and methods to phenomena in industrial and organizational settings, with emphasis on personnel selection, classification and evaluation, employee attitudes, morale and motivation, and psychological analysis of the condition of work.

4010-29. Special Topics in Psychology. (1-3). Topics varied and announced in *Schedule of Classes.*

4030. Issues in Psychotherapy Research. (3). Examination of research evidence pertaining to basic questions about psychotherapy and its effectiveness. Readings include both classic contributions and current research findings.

4032. Research Methodology. (3). Discussion of advanced topics in methodology. In addition, student completes all phases of a research project, including question formulation, literature review, design, data analysis, and report writing. Reserch projects evolve from individual student interests. PREREQUISITE: PSYC 3002 or permission of the instructor.

4033. Language Development. (3). An examination of the theories and research in the area of language acquisition. Particular emphasis is on all aspects of language development in the preschool years, including phonology, syntax, semantics, and pragmatics. PREREQUISITE: PSYC 3103 or permission of the instructor.

4034. Children's Social Relationships. (3). Examines children's social relationships, particularly peer relationships. Topics include: social cognitive processing; developmental implications of group status and dyadic friendships; behavioral interactions among peers; impact of reputation on peer group status; gender differences in peer relations; parent management of peer activities; and analyses of conflict and of aggressors and their victims. PREREQUISITES: Successful completion of a course in child psychology and permission of instructor.

4040-49. Honors Special Topics. (3). Topics varied and announced in *Schedule of Classes.*

4101. History of Psychology. (3). Comprehensive survey and critical analysis of the philosophical and scientific antecedents of contemporary psychology. PREREQUISITE: PSYC 3001, 3002, and three hours in 3100 series and three hours in 3300 series. Enrollment preference granted to seniors in their final semester. **[I]**.

4305. Mind, Brain, and Intelligence, Honors. (3). Interdisciplinary studies of cognition, behavior, emotion, intelligence, and brain mechanisms. Synthesis of research contributions from cognitive science, neuroscience, artificial intelligence, and philosophy. This course is cross-listed with UNHP 4302.

4503. Special Problems in Psychology. (1-3). Student, under faculty supervision, may (a) read intensively in specialized area, (b) conduct psychological research and/or (c) obtain field experience in community institutions where psychological principles are applied. NOTE: *4503 and 4504 may be taken for a combined total of 9 hours, no more than 6 of which may be with the same faculty member.* PREREQUISITE: permission of the department. (S/U).

4504. Directed Research. (3). Majors receive first hand research experience under tutorship of individual faculty member. Students may work individually or in small groups depending upon project. Projects conform to set of guidelines available from department. NOTE: *PSYC 4503 and 4504 may be repeated for a combined total of up to 9 hours, 6 with any one faculty member.* PREREQUISITE: permission of department. (S/U).

4996. Honors Senior Thesis. (3). Original research conducted under direction of faculty supervisor, and with approval of Honors Committee. PREREQUISITE: Admission to Honors Program.

SOCIOLOGY AND SOCIAL WORK

PROFESSOR
REBECCA F. GUY, *Chair*
Room 231, Clement Humanities Building
PROFESSOR
NELLIE P. TATE, *Director*
Division of Social Work
Room 229, Clement Humanities Building
http://www.people.memphis.edu/~socinfo/socdept/homepage.html

Sociology 1111 is a prerequisite for all other courses in sociology except 2100 and 2101.

SOCIOLOGY (SOCI)

1111. Introductory Sociology. (3). Introduction to concepts, methods and theoretical perspectives in sociology. Basic principles of sociological reasoning introduced through lectures, reading assignments, and micro-computer instruction. **[G]**.

2100. Sociology of International Development. (3). Social change in an increasingly interdependent world; introduction to development theory and how relations among countries condition changes within them; cultural conflict, social inequality, education and ideology, industrialization, urbanization, multinational corporations, population problems, quality of life indicators. **[G]**.

2101. The Family in Global Perspective. (3). (Same as CSED 2101). Introduction to family as a primary, global, social institution. Contributions sociology, anthropology, and home economics have made to understanding how and why family systems vary worldwide and common bonds and problems facing families in modern societies. **[G]**.

3112. Contemporary Social Problems. (3). (1112). Sociological approaches to understanding contemporary social problems; magnitude, causes, consequences, and possible solutions to various

problems such as poverty, racism, sexism, problems of aging, crime, and population.

3311. Social Statistics. (3). Application of basic statistical concepts and techniques to social analysis. Description of data for single variables and for relationships between two variables. Tests of significance for relationships between two variables involving sample data. Use of packaged statistical computer programs for single- and two-variable analysis. **[C]**.

3322. Methods of Social Research. (3). Overview of process of social research; selection and formulation of problem, design of research, methods of investigation, analysis and interpretation of data, and report preparation. Emphasis on data collection techniques. PREREQUISITE: SOCI 3311.

3401. Social Inequality. (3). Unequal distribution of power, property, and prestige and social relations of dominance and subordination in the American class system; how and why this inequality develops and persists; differences in life chances and options across different social classes.

3420. Sociology of the South. (3). Political economy and major institutions in the South and implications for different races and classes. Attention to the South since World War II, including the Civil Rights movement.

3422. Racial and Ethnic Minorities: A Socio-Historical Approach. (3). Comparative study of racial and ethnic minorities in United States, how inequality is institutionalized in such areas as employment, education, political participation, and social relations; emphasis on how subordinate groups resist oppression and initiate social change. **[G]**.

3432. Sociology of Gender. (3). Traditional conceptions of masculinity and femininity and modifications of these resulting from economic, demographic and cultural changes. Socialization for masculine and feminine roles and variations in these roles throughout life cycle. Class, race, occupational and other institutional differences in sex roles

3501. Sociology of Deviant Behavior. (3). Problems in applying definitions of deviance in everyday life; theories about causes and consequences of deviance critically reviewed; types of deviance analyzed, ranging from interpersonal violence to various forms of sexual expression.

3541. Criminology. (3). (3521). Nature and significance of criminality; etiology of illegal behavior; trends in social reactions to crime and criminals. Evolution of biological, psychological, and sociological theories of criminal behavior.

3701. Individual and Society. (3). Basic theory and research dealing with study of human behavior in social situations; emphasis on communication processes, socialization, social roles, social self, and interaction in group contexts.

3801. Sociology of Organizations and Bureaucracies. (3). Analysis of bureaucratic organizations in modern society and effects on individual and group behavior; benefits of industrial-technological society and costs of bureaucratization and centralization of organizational life; current issues concerning individual autonomy, organizational productivity, and control.

3820. Sociology of Education. (3). Sociological analysis of education and its functions, school and community relationships; problems of social change and educational adjustments.

3831. Marriage and the Family. (3). American family patterns, including mate-selection, man-woman relationships, marital satisfaction, parent-child communication, divorce, alternative lifestyles and other contemporary issues.

3860. Sociology of Religion. (3). Role of religion in modern society; relationship between religion and other spheres of life; sociological examination of cults, sects, churches, and religious movements; causes and consequences of religious beliefs and practices.

3940. Social Change. (3). Sociological analysis of theory, nature, meaning, and consequences of social change.

4210. Rise of Sociological Theory. (3). Nature, grounds, and explanatory powers of various forms of sociological theory; analysis of bases for scientific and philosophical assumptions and social and political contexts; major theorists including Durkheim, Marx, Weber, Simmel.

4211-6211. Contemporary Sociological Theory. (3). Major frameworks of 20th century sociological thought, including theoretical schools of functionalism, exchange theory, critical theory, symbolic interactionism, phenomenological sociology, and ethnomethodology; current social and political trends and issues.

4312-6312. Intermediate Social Statistics. (3). Multivariate analysis of social data. Use of computer programs for data management and statistical analysis. PREREQUISITES: SOCI 3311, 3322, or equivalent, or permission of the instructor.

4420. Racial Inequality. (3). Relations of dominance and subordination in the United States. Focus on social and political experiences of African Americans, Asian Americans, and Latinos, especially strategies employed to resist oppression and reduce inequality.

4442. Sociology of Poverty. (3). Structural sources of inequality and how experiences of poverty are shaped by race, gender and age. **[W]**.

4460. Black and White Women in the South. (3). How history of South and political-economic structure has shaped black and white women's work, family, community activities, and relationships; emphasis on collaboration and competition aspects, identity issues, and demographic characteristics; focus on the Memphis area. **[W]**.

4541-6541. Sociology of Aging. (3). Ageism in sociocultural contexts; current beliefs, values, and norms regarding aging; structural location of aging in society; and implications of ageism in employment, poverty, private and institutional housing, crime, physical illness and mental illness.

4631. Cities in Change. (3). Historical transformation of urban communities; effects of urbanism on behavior; patterns of class, race and ethnic segregation in American cities; growth and decline of cities in relation to social, political, and economic forces, global patterns of urbanization: causes and consequences. **[W]**

4641. Sociology of the Global Environment. (3). Examination of interactions between physical environment in which we live and human societies which we have created. Emphasis on crises of global environment and efforts toward sustainable development.

4642. Culture and Modernization of East Asia. (3). Sociological examination of impact of cultural traditions embedded in East Asian worldview on economic modernization of Japanese, Korean, and Chinese societies. Emphasis on significance of alternative paths to global economy.

4702. Personal Relations and Primary Groups. (3). Principles and dynamics of personal relationships within context of groups. Surveys social psychological theories of origin, maintenance and dissolution of relationships. Applied approach. Includes sociation in general and emphasizes varieties of love.

4842-6842. Sociology of Occupations and Professions. (3). Sociological analysis of division of labor, occupational groupings, career patterns, and professional associations in modern American society; meaning of work.

4851. Medical Sociology. (3). Examination of human arrangements and their human legitimations within which variations in human biology are discovered, defined, diagnosed, described, and disposed of as "disease."

4852. Sociology of Mental Illness. (3). Examination of human arrangements and their legitimations within which "incomprehensible" behavior is discovered, defined, diagnosed, described, and disposed of as "mental illness."

4900-09-6900-09. Special Topics in Sociology. (3). Special areas of sociology not otherwise included in the curriculum.

4912. Directed Individual Study. (1-6). Individually directed advanced reading and/or research in special areas of interest. NOTE: *Course may be repeated for maximum of 6 hours credit.* PREREQUISITE: permission of department chair.

4923. Social Institutions and the Life Cycle. (3). Analysis of social institutions from life cycle perspective; social institutions studied from perspective of their specific function for and appropriateness to specific stages of life cycle development. **[W]**.

4999. Senior Thesis Seminar. (3). Analysis of process and practice of sociological inquiry. Emphasis on integration of sociological theory, research methods, statistics, and knowledge of a substantive area through formulation and completion of original research project. Research problem will be formulated and executed by student with consultation and supervision of instructor. PREREQUISITES: SOCI 3311, 3322, 4210 or 4211, and nine upper division hours. **[I, W]**.

SOCIAL WORK (SWRK)

SWRK 2910 and 2911 are prerequisites for all other courses in the Division of Social Work; may be taken after earning 40 credit hours, as specified in the note accompanying the requirements for the major; and are required of Social Work Majors.

2910. Social Work Profession and Practice (4). (3901). Overview of social work as profession, including introduction to its value base, knowledge base, and skill base; and roles of social workers in social service agencies. Community laboratory experience required. *Two and one-half lecture, one and one-half laboratory hours per week.* NOTE: The following courses are to be taken prior to or concurrently with SWRK 2910: ENGL 1102; ANTH 1200; and two courses (with a minimum grade of C) from the following: SOCI 1111; PSYC 1101; POLS 1100; or ECON 2120.

2911. Social Response to Human Need. (3). Introduction to historical and contemporary issues related to American social welfare systems; analysis of impact on vulnerable populations, value implications, change processes, and culturally-relevant concepts of need. Volunteer experience required. NOTE: The following courses are to be taken prior to or concurrently with SWRK 2911; ENGL 1102; ANTH 1200; and two courses (with a minimum grade of C) from the following: SOCI 1111; PSYC 1101; POLS 1100; or ECON 2120.

3902. Human Development and Social Interaction. (3). Overview of human development from birth through old age; focus on interaction of biological, psychological, and socio-cultural factors; major developmental theories, transitional phases, and variant lifestyles; relevance to social functioning and social work practice. PREREQUISITES: SWRK 2910 or 2911 and BIOL 1071/1072 or instructor's permission.

3903. Models of Social Intervention. I. (3). Overview of traditional social casework methodology; emphasis on theoretical approaches and generalist practice; beginning applications of case study model. PREREQUISITE: SWRK 2911, 3901, 3902, or director's permission.

3904. Models of Social Intervention II.(3). Continuation of SWRK 3903, with emphasis on application of theory through assessment, intervention planning, use of community resources, and functions of social workers. Extensive case analysis. PREREQUISITE: SWRK 3903.

3906. Models of Social Intervention III. (3). (4932). Theory and application of group dynamics concepts as applied to individual in group, committee and community structures and functions, roles of social worker in these settings. PREREQUISITES: SWRK 2910, 2911, and 3903. COREQUISITES: SWRK 4830 and 4840.

3920. Social Welfare Policies and Programs: Theory and Application. (3). Overview of social welfare policy development and methods; programs resulting from these efforts; influence of competing value orientations; exposure to differing models of policy analysis; and implications for professional practice including the role of social work in developing, implementing, and evaluating social programs. PREREQUISITES: SWRK 2910 and 2911. COREQUISITE: SWRK 3930.

3930. Social Work Research. (3). History and methods of social work research including scientific thinking, application of statistical operations, and systematic approaches to acquisition of social work knowledge. PREREQUISITES: SWRK 2910 and 2911 and SOCI 3311.

4830. Field Instruction in Social Work I. (3). Supervised internship in social service agency or program. *Minimum two days per week required.* PREREQUISITE: SWRK 3904. COREQUISITES: SWRK 4840 and 3906.

4831. Field Instruction in Social Work II. (4). Continuation of supervised internship. *Minimum three days per week required.* PREREQUISITES: SWRK 4830 and 4840. COREQUISITE: SWRK 4841.

4840. Integrative Field Seminar I. (2). Integration of social work theory with field instruction experiences. COREQUISITE: SWRK 4830 and 3906.

4841. Integrative Field Seminar II. (2). Continuation of SWRK 4840. COREQUISITE: SWRK 4831.

4911-19. Special Topics in Social Work. (3). Topics of contemporary interest in social work profession and in social welfare practices. PREREQUISITE: SWRK 2911 or permission of instructor.

4933. Directed Individual Study. (1-4). Directed advanced reading, field study and/or research in special areas of social work, not otherwise provided in curriculum. NOTE: No more than 4 hours may be taken in any one semester. *May be repeated for maximum of 6 semester hours credit.* PREREQUISITE: Social Work major and permission of director, Division of Social Work.

4934. Child Welfare Policy and Services. (3). Historic overview and contemporary application of child welfare policy; problems in policy development; contemporary American child welfare services in both public and private domains. PREREQUISITE: SWRK 2910, 2911, and 3920.

ROTC Programs

AEROSPACE STUDIES

LIEUTENANT COLONEL
ROBERT N. HUTCHINGS, JR.
Professor of Aerospace Studies
Room 118, Hayden Hall

http://www.people.memphis.edu/~AFROTC/

The Department of Aerospace Studies provides a four-year program of instruction for all qualified U.S. citizens, male and female, divided into two phases, each of two years duration. The first, termed the General Military Course, offers instruction in the foundation of leadership and Aerospace-age citizenship. The second, termed the Professional Officer Course, builds upon these foundations in developing upperclassmen who are to become Air Force officers and serve on active duty upon graduation and commissioning. Students may apply for the two-year or four-year program, or they may enroll one year before applying for the two-year program.

Instruction in Aerospace Studies has been an important phase of the curriculum at The University of Memphis since 1951. Active duty Air Force personnel, approved by the university president, are detailed by the Department of the Air Force to administer the instructional program. Air Force officers serve under appointment by the university as Professor or Assistant Professor of Aerospace Studies.

THE GENERAL MILITARY COURSE (GMC)

The two-year (4 semesters) General Military Course consists of one hour a week of classroom instruction and one and one-half hours a week in Leadership Laboratory. Textbooks are furnished by the Air Force without charge. Air Force uniforms are furnished and must be properly worn and kept in good condition. Cadets who successfully complete the GMC may apply for admission to the Professional Officer Course.

THE PROFESSIONAL OFFICER COURSE (POC)

The Professional Officer Course provides instruction and systematic training to selected eligible students who desire to qualify as officers in the United States Air Force while pursuing their academic studies at the university. Successful completion of the requirements for the POC and for a baccalaureate degree leads to a commission in the United States Air Force as a Second Lieutenant. To be eligible for selection to the POC, a student must have at least two years remaining at the university (undergraduate, graduate, or a combination). Final selection is based on academic standing, leadership potential, percentile score on the Air Force Officer Qualifying Test, and physical qualifications. All eligible POC members receive an incentive payment of up to $1,000 per semester which is applied toward university tuition and textbook costs. In addition, members are furnished ROTC course textbooks without charge, receive a subsistence allowance of $150.00 per month and are issued uniforms provided by the Air Force.

THE TWO-YEAR PROGRAM

All students who meet qualifying criteria may apply for selection to the Professional Officer Course under the Two-Year Program if they are not in the Four-Year Program. Processing of applications for the POC begins in the fall of each year. Application may be submitted through March 15. If selected, the student will attend a six-week field training program during the summer preceding entry into the POC. Graduates of the six-week field training are enrolled in the POC with the same status as cadets in the four-year program.

LEADERSHIP LABORATORY

This lab is designed around a microcosm of the U.S. Air Force. It gives the cadets the opportunity to develop their leadership potential while allowing the staff to make evaluations based on actual managerial and leadership situations.

AIR FORCE ROTC COLLEGE SCHOLARSHIP PROGRAM

Scholarships paying full tuition and fees, book allowance, and transportation to Memphis. and a tax free subsistence allowance of $150.00 per month are available to entering freshmen and university students who are competitive academically and will enroll in the Air Force ROTC program. Details concerning qualifications and applications can be obtained from the Department of Aerospace Studies. NOTE: Several loan funds are also available to students enrolled in AFROTC. For more information, contact the department staff.

FIELD TRAINING

Field Training is offered during the summer months at selected Air Force bases throughout the United States. Students in the four-year program participate in four weeks of Field Training (AERO 3211), usually between their sophomore and junior years. Students applying for entry into the two-year program must successfully complete six weeks of Field Training (AERO 3212) prior to enrollment in the Professional Officer Course.

MINOR IN AEROSPACE STUDIES

Upon successful completion of 18 semester hours in Aerospace Studies with a minimum grade of C, a cadet may apply for a minor in Aerospace Studies.

SUPPLEMENTAL COURSES PROGRAM

The AFROTC Supplemental Courses Program (SCP) exists to enhance the career utility and officer performance of persons commissioned through AFROTC. The program consists of required and recommended college/university-taught courses. Cadets must successfully complete the required supplemental courses in addition to all Aerospace Studies courses.

General Military Course (GMC): Scholar-ship cadets must successfully complete a course in English composition. Additionally, they are encouraged to take a course in speech. Four-year scholarship cadets must satisfactorily complete the English composition course by the end of the GMC. GMC cadets receiving scholarships of less than four years duration will have two academic years to complete the English composition course. Failure to satisfactorily complete the required supplemental course in the specified period of time will result in termination of scholarship entitlements.

Non-scholarship four-year GMC cadets, two-year program applicants, and persons not required to complete the GMC need not take the GMC supplemental coursesbefore POC entry. However, successful completion of GMC supplemental courses may enhance their chances for POC selection.

Professional Officer Course: cadets must successfully complete a course in mathematical reasoning before commissioning. Ideally, this course should include the acquisition of a specific skill, for example, statistics, computer science, or calculus.

Course Descriptions

AEROSPACE STUDIES (AERO)

1111. The Air Force Today. (1). Survey course designed to introduce students to the United States Air Force and Air Force ROTC. Topics include Air Force mission and organization, customs and courtesies, officer opportunities, problem solving, and communication skills. *One class hour per week and one and one-half hours of Leadershrp Laboratory.* ***[G]**.

1112. The Air Force Today. (1). Continuation of AERO 1111. *One class hour per week and one and one-half hours of Leadership Laboratory.* ***[G]**.

2211. The Air Force Way. (1). Survey course designed to facilitate the transition from AFROTC cadet to officer candidate. Topics include Air Force heritage and leaders, Quality Air Force, ethics and values, leadership, group problem solving, and communication skills. *One class hour per week and one and one-half hours of Leadership Laboratory.* ***[G]**.

2212. The Air Force Way. (1). Continuation of AERO 2211. *One class hour per week and one and one-half hours of Leadership Laboratory.* ***[G]**.

PROFESSIONAL OFFICER COURSE

3211. Aerospace Studies Four-Week Field Training. (4). Twenty-eight day course conducted during summer at active installation of USAF, consists of approximately 185 hours of instruction in Air Force base functions, leadership, physical training, Air Force environment, career orientation, and survival training. Students assigned to groups of twenty-five and individually counseled and evaluated on their performance. Emphasis on self-initiated leadership activities. PREREQUISITE: AERO 1111, 1112, 2211, 2212, or equivalent.

3212. Aerospace Studies Six Week Field Training. (6). Forty-two day course conducted during summer at active installation of USAF. Consists of approximately 258 hours of instruction on role of military forces, organization of Defense Department, instruments of national security, Air Force base functions, leadership, physical training and Air Force environment. Students are assigned to groups of approximately twenty-five and individually counseled and evaluated on their performance.

3311. Air Force Leadership and Management. (3). Study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to demonstrate and exercise practical application of concepts studied. *Three class hours per week and one and one-half hours of Leadership Laboratory.**

3312. Air Force Leadership and Management. (3). Continuation of AERO 3311. *Three class hours per week and one and one-half hours of Leadership Laboratory.*

4411. Preparation for Active Duty. (3). Examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics include the military as a profession, officership, military justice, civilian control of the military, and preparation for active duty. Within this structure, continued emphasis is given to refining communication skills. *Three class hours per week and one and one half hours of Leadership Laboratory.**

4412. Preparation for Active Duty. (3). Continuation of AERO 4411. *Three class hours per week and one and one-half hours of Leadershrp Laboratory.**

***Leadership Laboratory.** Freshman-/Sophomore-level topics (supporting the General Military Course) include Air Force customs and courtesies, drill and ceremonies, issuing military commands, instructing, environment of the Air Force officer, and officer opportunities. Junior-/Senior-level topics (supporting the Professional Officer Course) include such advanced leadership experiences as planning and controlling cadet wing activities, preparing and presenting oral and written communication, and providing the guidance and information needed to train and motivate other cadets. *One and one-half hours per week.*

MILITARY SCIENCE

LIEUTENANT COLONEL JAMES M. DUNN
Professor of Military Science
Room 107, Annex IV, Bldg 505
http://www.cbu.edu/~kroberts/Lcadre.html

The Department of Military Science provides a four-year program of instruction designed to provide qualified college men and women with practical experience in the art of organizing, motivating and leading others. The program is divided into two courses each of two years duration. The first, called the Basic Course, offers instruction in leadership skills, soldiering skills, and the role and use of armed forces. The second, called the Advanced Course, builds on the Basic Course, offers practical leadership experience, and prepares the student for commissioning as an Army officer. Students may apply for the four year program, which can be completed in three years with department permission, or for the two-year program.

Department faculty and staff are active duty Army personnel detailed by Department of the Army and approved by the university president. The Army officers are appointed by the university as Professor or Assistant Professor of Military Science. Students interested in enrolling in any Military Science course should contact the Department of Military Science.

THE BASIC COURSE

The Basic Course, two years in duration, consists of two semesters of one hour per week of classroom instruction and two semesters of two hours per week of classroom instruction. Courses are designed to be taken in the following order: 1100, 1110, 1115, 1120, 2100, 2105, 2115, 2120. All textbooks are furnished, without charge, by the department.

All offered courses count as elective credit toward the total university required hours for a degree. ARMY 2115/2120 meets the physical activity portion of the General Education Fitness and Wellness requirement.

The Basic Course is designed for incoming freshmen. All other students are eligible to enter and may compress the Basic Course requirements into one year, with department permission. There is NO MILITARY OBLIGATION for enrolling in the Basic Course. Unless specified in the course description, students in the Basic Course are not required to wear uniforms or attend leadership laboratory.

Students who successfully complete the Basic Course may apply for entry into the Advanced Course.

THE ADVANCED COURSE

The Advanced Course prepares qualified, selected male and female students for commissioning as Army officers while they continue to pursue academic degrees. Upon graduation, students may then serve in the Regular Army, Army Reserve, or Army National Guard in a variety of career fields.

To be eligible for the Advanced Course, the student must have completed the Basic Course or equivalent, (see 2-year program), be enrolled in the university fulltime, have at least two years remaining at the university (undergraduate or graduate), and be a U.S. citizen. Final selection is based on demonstrated academic performance, leadership potential, a qualifying score on the Officer Selection Battery of Tests, and physical qualifications.

The Advanced Course is two years in duration. During each of four semesters, the student attends three hours per week of classroom instruction and two hours per week of leadership laboratory. It is composed of ARMY 3100, 3111, 3115, 3121, 4100, 4110, 4111, 4115, and 4121, in sequence. All students receive a monthly subsistence allowance of $150.00, tax free, while enrolled in classes. All textbooks, uniforms, and equipment are furnished, without charge, by the department.

Students are given the opportunity to develop their leadership skills through the leadership laboratory, field training, and the Advanced Camp. The leadership laboratory is designed around a cadet structure that parallels a U.S. Army unit. Field training exercises are conducted over a weekend and are an extension of the laboratory. Students are also required to attend a six-week Advanced Camp during the summer between their two years in the Advanced Course. Advanced Camp is held at a U.S. Army post. Students are paid for the six weeks at the rate of one-half the pay of a Second Lieutenant and are furnished quarters and rations as well as transportation to and from the post.

All required courses count as elective credit toward the total university required hours for a degree. Completion of the Advanced Course meets the Fitness and Wellness General Education requirement.

THE TWO-YEAR PROGRAM

The Two-Year Program provides the opportunity to those students who did not

enroll in the Four-Year Program to enroll in the Advanced Course. There are three methods for students to receive placement credit for the Basic Course and enter directly into the Advanced Course.

Students who meet qualifying criteria may receive credit for the Basic Course by attending the six-week Basic Camp at Fort Knox, Kentucky, during the summer. NO MILITARY OBLIGATION is incurred by the student by attending the Basic Camp. Students are paid for the six weeks at the rate of one-half the pay of a Second Lieutenant and are furnished quarters and rations as well as transportation to and from, or a mileage allowance for use of their own automobile. Successful completion of the Basic Camp will make the student eligible to enter the Advanced Course. Interested students should contact the Department of Military Science anytime during the academic year preceding the summer they desire to attend the camp.

Students who have completed Army Basic Combat Training and Advanced Individual Training or who have completed a minimum of three years of Army Junior ROTC in high school may be granted credit for the Basic Course by the Professor of Military Science and would then be eligible for entry into the Advanced Course, provided all other requirements are met. These students, as well as Basic Camp graduates, selected for enrollment in the Advanced Course are enrolled with the same status as cadets in the Four-Year Program.

THE MINOR

A minor in Military Science can be obtained through meeting the following requirements: 19 semester hours consisting of ARMY 2105, 3100, 3111, 3115, 3121, 4100, 4111, 4115 and 4121.

SCHOLARSHIP PROGRAM

Scholarships paying tuition, maintenance fee and other fees, a book allowance, and a tax-free subsistence allowance of $150.00 per month are available to university freshmen and sophomores who are competitive academically and who will enroll in the Army ROTC program. Applications are taken from December to February each academic year. Details concerning qualifications can be obtained from the Department of Military Science.

SIMULTANEOUS MEMBERSHIP PROGRAM

The Simultaneous Membership Program is a voluntary program under which qualified cadets in the Advanced Course may concurrently join an Army National Guard unit. The program is designed to provide cadets with additional opportunities for leadership development and, at the same time, provide them with practical unit experience as Second Lieutenant. Cadets serve in an officer-trainee capacity and participate in regular unit drills held one weekend per month and two weeks per summer. Cadets are paid for all drills at the rate of a sergeant. This pay is in addition to the regular monthly subsistence for Army ROTC cadets. Details concerning qualifications and information on availability of allocations can be obtained from the Department of Military Science.

PROFESSIONAL MILITARY EDUCATION

Professional Military Education is a component of the academic preparation for students desiring to pursue a commission as an Army officer. It consists of two essential parts, a baccalaureate degree and completion of university-taught, undergraduate courses from each of five designated fields of study. The fields of study are written communications, human behavior, military history, computer literacy, and math reasoning. Military Science students enrolled in the Advanced Course are also encouraged to take management and national security studies. Students may substitute approved alternative courses for any of these requirements. This is a requirement for students enrolled in the Advanced Course only, though applicable courses taken during enrollment in the Basic Course or before enrollment may still meet the requirement. Related required and elective courses taken for university degree requirements may also satisfy the requirement. Some of the Professional Military Education required courses may be waived by the Professor of Military Science if they would interfere with a student's required curriculum for award of a particular university degree.

SPONSORED ACTIVITIES

The Department of Military Science sponsors the following voluntary extracurricular activities to provide students in both the Basic Course and Advanced Course with additional opportunities to develop leadership in conjunction with extending the student's knowledge of military skills:

1. The Army ROTC Tiger Color Guard—Members develop skill in standard drill and military ceremonies. The team provides color guards at The University of Memphis athletic events and drills competitively against ROTC teams of other colleges and universities. The team is open to individuals enrolled in any Military Science course.

2. U of M Ranger Company—Members develop skills associated with patrolling, mountaineering, survival training, and other similar activities. The Ranger Company is an adventure-type unit under the direction of Army ROTC Advanced Course cadets. Membership is open to all interested full-time students.

Course Descriptions

MILITARY SCIENCE (ARMY)

NOTE: Leadership laboratory provides the forum for the reinforcement of formal classroom instruction. Lab revolves around the practical application of the theories of leadership with a "hands-on" approach to learning. Provides opportunities for cadets to exercise leadership, planning, and management skills as well as covering independent topics including: rappelling, drill and ceremonies, basic rifle marksmanship, first aid, and orienteering.

1100. Leadership Laboratory. (1). *Two laboratory hours per week.* COREQUISITE: ARMY 1110.

1110. Introduction to Military Science. (1). Introduction to Army ROTC with hands-on approach through several basic military skills. Lectures and practical exercises in following areas: rappelling, communications, weapons, first aid, and land navigation. There is no military obligation. COREQUISITE: ARMY 1100.

1115. Leadership Laboratory. (1). *Two laboratory hours per week.* COREQUISITE: ARMY 1120.

1120. Leadership and Confidence Building. (2). Basic military first aid skills; lectures and practical exercises in basic emergency treatment for fractures, lacerations, heat and cold injuries; cardiopulmonary resuscitation. THIS COURSE DOES NOT PROVIDE RED CROSS OR ANY OTHER CERTIFICATION. COREQUISITE: ARMY 1115.

2100. Leadership Laboratory. (1). *Two laboratory hours per week.* COREQUISITE: ARMY 2105.

2105. American Military History. (3). Developments since colonial period; emphasis on background and growth of national military and naval establishments, military and naval thought, difficulties accompanying modernization and assumption of global responsibilities, and problem of relationship between civilian and military-naval sectors in democracy. COREQUISITE: ARMY 2100.

2115. Leadership Laboratory. (1). (2110 lab). *Two laboratory hours per week.* COREQUISITE: ARMY 2120. **[G]**.

2120. Fundamental Survival Skills.(1).(2110). Basic Military Skills including map reading, military first aid skills and small unit leadership. *One hour weekly classroom instruction.* COREQUISITE: ARMY 2115. **[G]**.

2140. Small Unit Tactics I. (2). Emphasis on preparation of the individual for combat. Preparation of potential leaders in combat through study of the knowledge and skills needed by an individual soldier. Skill developed in planning and organizing by combat patrols. Course includes a series of field practicums.

2145. Small Unit Tactics II. (2). Advanced concepts in reconnaissance, raid, and ambush patrolling techniques, extended patrolling operations, and application techniques for specialized equipment. Leadership skills through student-led patrols. Includes series of field practicums. Expands material taught in ARMY 2140 but may be taken independently of 2140.

2190. Basic Camp Practicum. (1-6). Six-week training normally taken during the summer between the second and third years by those students who have not taken previous ROTC training, or who have not completed the required basic military science courses for advanced course enrollment. Training conducted at designated U.S. Army installation and includes practical experience in leadership, small unit tactics, weapons drill, and communications under field conditions. After completion of camp, student required to complete satisfactorily an examination administered by Military Science Department. Student must register for this course following successful camp completion to receive appropriate credit. Students receive approximately $670.00 pay, room and board, and travel expenses. No military obligation is incurred. PREREQUISITE: Permission of Professor of Military Science

3100. Leadership Laboratory. (1). *Two laboratory hours per week.* COREQUISITE: ARMY 3111.

3111. Applied Leadership I. (3). (3110, 3190). Presentation, discussion, practical exercise, and field training on fundamentals of map reading and land navigation; development of skills in individual and small unit tactical planning and operations; and professional subjects in leadership, leadership assessment, and principles of war. *Three lecture hours per week, three hours physical training per week, and field training exercises on two weekends during semester.* CO-REQUISITE: ARMY 3100. PREREQUISITE: permission of the Professor of Military Science.

3115. Leadership Laboratory. (1). *Two laboratory hours per week.* COREQUISITE: ARMY 3121.

3121. Applied Leadership II. (3). (3120). Continuation of first year advanced course. COREQUISITE: ARMY 3115. PREREQUISITE: permission of the Professor of Military Science.

3190. Advanced Camp Practicum. (6). Six weeks of training at an Army post, normally taken between the 1st and 2nd years of Advanced Course; practical experience in leadership, small unit tactics, U.S. Army weapon systems and equipment, and patrolling operation; examination administered by the Department of Military Science required to receive academic credit. Students must register for course following successful camp completion to receive credit. PREREQUISITE: permission of Professor of Military Science.

4100. Leadership Laboratory. (1). *Two laboratory hours per week.* COREQUISITE: ARMY 4111.

4111. Seminar in Leadership and Planning. (3). (4110). Leadership and management skill development in specific areas of oral and written communications, training management, personnel evaluation and counseling, personnel management systems of Army, U.S. Army logistic systems, military justice, and familiarization with ethics of military professional. This course, in conjunction with 4121, completes the cadet's preparation for commissioning as a Second Lieutenant in the Army Reserve or National Guard. *Three lecture hours every week, three hours physical training each week, and field training exercises on two weekends during semester.* COREQUISITE: ARMY 4100. PREREQUISITE: permission of the Professor of Military Science.

4115. Leadership Laboratory. (1). *Two laboratory hours per week.* COREQUISITE: ARMY 4121.

4121. Seminar in Organizational Leadership. (3). (4120). Continuation of second year of advanced course. COREQUISITE: ARMY 4115. PREREQUISITE: permission of the Professor of Military Science.

NAVAL SCIENCE

CAPTAIN CHARLES A. STEVENSON
Professor of Naval Science
Room 101A, Art Annex
http://www.people.memphis.edu/~navallib/

The Department of Naval Science provides a four-year program of instruction leading to a commission as an officer in the U.S. Navy or Marine Corps. The program is known as the Naval Reserve Officer Training Corps (NROTC) and is voluntary in that students may withdraw from the program at any time during the freshman year. At the start of the sophomore year, scholarship NROTC students enter into an agreement with the Department of the Navy that specifies active duty service after college work is completed.

REQUIREMENTS

The general requirements for enrollment in the NROTC College Program are to:

1. be a citizen of the United States
2. be physically qualified
3. possess personal characteristics and potential requisite to be a Naval/Marine Corps Officer
4. not be a conscientious objector
5. meet other requirements as specified by the U.S. Navy.

THE FOUR-YEAR PROGRAM

The four-year program is geared to students who enter the NROTC program as freshmen. Students are introduced to the field of naval science, which encompasses a broad variety of subjects ranging from basic seamanship to fleet operations. Topics covered during the first half of the four-year program include principles of naval ships systems, naval weaponry, seapower, and maritime affairs. The second half of the four year program (junior and senior years) is devoted to navigation and naval operations, naval leadership and management, and, for Marine Corps Option Students, Amphibious Warfare and a study of warfare through the ages. In addition to specified courses, students will also meet with their NROTC unit weekly for orientation experiences to service life. Six-week summer training cruises are also part of the naval science program.

THE TWO-YEAR PROGRAM

The two-year program is for interested students who are eligible and qualify to participate in NROTC in their junior and senior years. Students should apply for enrollment through the Professor of Naval Science before the spring semester of the sophomore year. If accepted into the two-year program, students will attend the six-week Naval Science Institute at Newport, Rhode Island, during the summer between the sophomore and junior years. Upon return to campus, students will participate in the NROTC program.

FINANCIAL BENEFITS AND NROTC SCHOLARSHIPS

All NROTC students receive required uniforms and naval science textbooks when they begin the program as freshmen. In their junior year as two-year program students, they will also receive a tax-free subsistence allowance of $150 a month. NROTC scholarship students will also receive tuition, cost of textbooks, instructional fees and $150 a month. Students receive pay and are reimbursed for associated travel expense while participating in summer training experiences. Students interested in the Naval ROTC programs should contact the Professor of Naval Science.

Course Descriptions

NAVAL SCIENCE (NAVY)

1100. Navy Laboratory. (1). *Two laboratory hours per week.* **[G].**

1101. Introduction to Naval Science. (2). Qrientation and concepts of seapower. Mission, organization, and warfare components of the Navy and Marine Corps. CQREQUISITE: NAVY 1100.

1104. Navy Laboratory. (1). (2203). *Two laboratory hours per week.* **[G].**

1105. Seapower and Maritime Atfairs. (3). (2202). U.S. naval history from the Revolution to the present with emphasis on major developments. Present day concerns in seapower and maritime affairs. CQ-REQUISITE: NAVY 1104.

2204. Navy Laboratory. (1). (1103). *Two laboratory hours per week.* **[G].**

2205. Naval Ships Systems I—Engineering. (3). (1102). Ship characteristics and types including ship design, hydrodynamic forces, stability, compartmentation, propulsion, electrical and auxiliary systems, interior communications, ship control, and damage control. CQREQUISITE: NAVY 2204.

2206. Navy Laboratory. (1). (2200). *Two laboratory hours per week.* **[G].**

2207. Naval Ships Systems II—Weapons. (3). (2201). Theory and employment of weapons systems. Processes of detection, evaluation, threat analysis, delivery, guidance, and explosives. COREQUISITE: NAVY 2206.

3000. Naval Science Institute (NSI). (8). Intensive six-week professional academic and training program conducted each summer at a naval installation by the Chief of Naval Education and Training for students entering the two-year NROTC Programs. The Naval Science Institute is the equivalent of the NRQTC Basic Course. **[G].**

3301. Navigation and Naval Operations I. (3). Piloting and celestial navigation including theory, principles, and procedures, use of charts, visual and electronic aids, and the theory and operation of magnetic and gyro compasses. *Three class hours and two hours of Navy Laboratory* per week.*

3302. Navigation and Naval Operations II. (3). International and inland rules of the nautical road, relative-motion vector-analysis theory, relative motion problems, formation tactics, and ship employment. *Three class hours and two hours of Navy Laboratory* per week.*

3310. Evolution of Warfare. (3). Historical development of warfare from the beginning of recorded history to the present focusing on the impact of major military theorists, strategists, tacticians, and technological developments. *Three class hours and two hours of Navy Laboratory* per week.*

4000. Marine Corps Leadership Training. (6). Summer instruction ("Bulldog") conducted at the Marine Corps Officer Candidate School, Quantico, Virginia. Intensive six-week professional training program for Marine Qption Junior Midshipmen. Focuses on Marine Corps history and tradition, leadership under high stress situations, and effective management of men and materials in simulated combat conditions.

4401. Naval Leadership and Management I. (2). Advanced study of organizational behavior and management in the context of the naval organization. Practical applications are explored by the use of experiential exercises, case studies, and laboratory discussions. *Two class hours and two hours of Navy Laboratory* per week.*

4402. Naval Leadership and Management II. (2). Naval junior officer responsibilities in naval administration; builds on and integrates the professional competencies developed in prior course work and professional training. *Two class hours and two hours of Navy Laboratory*per week.*

4410. Amphibious Warfare. (3). Historical survey of the development of amphibious doctrine and the conduct of amphibious operations. Emphasis is placed on the evolution of amphibious warfare in the 20th century, especially during World War II. *Three class hours and two hours of Navy Laboratory* per week.*

***Navy Laboratory.** *Focuses on the reqursite moral, leadership and physical qualifies for becoming a commissioned officer.*

The Fogelman College of Business and Economics

DONNA M. RANDALL, Ph.D., *Dean*
Room 432, Fogelman Business and Economics Building

School of Accountancy

CRAIG J. LANGSTRAAT, LL.M., C.P.A., *Interim Director*
Room 200A, Fogelman Business and Economics Building

ACADEMIC PROGRAMS

The Fogelman College of Business and Economics is currently reorganizing its administrative structure. The new structure of the college will be reflected in the next edition of this bulletin. Meanwhile, please direct your questions to (901) 678-5402.

Department	Major	Concentration Within Major	Degree Offered
School of Accountancy	Accounting		Bachelor of Business Administration (B.B.A.)
Department of Economics	Business Economics		Bachelor of Business Administration (B.B.A.)
Department of Finance, Insurance and Real Estate	Finance		Bachelor of Business Administration (B.B.A.)
	Risk Management and Insurance		Bachelor of Business Administration (B.B.A.)
	Real Estate		Bachelor of Business Administration (B.B.A.)
Department of Management	Management		Bachelor of Business Administration (B.B.A.)
Department of Management Information Systems & Decision Sciences	Management Information Systems		Bachelor of Business Administration (B.B.A.)
	Production Operations Management		Bachelor of Business Administration (B.B.A.)
Department of Marketing	Marketing Management		Bachelor of Business Administration (B.B.A.)
	Sales		Bachelor of Business Administration (B.B.A.)
	Logistics/Marketing		Bachelor of Business Administration (B.B.A.)
Interdisciplinary Program	International Business		Bachelor of Business Administration (B.B.A.)

Individual program requirements described in the *Undergraduate Issue of the 1997-1999 Bulletin of The University of Memphis* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this bulletin; or consult the undergraduate bulletin website at: http://www.memphis.edu for the latest catalog updates.

PURPOSE

The function of The Fogelman College of Business and Economics is to provide the basic education necessary to prepare a person to enter the profession of business. A significant characteristic of the college is that it provides for concentration in the basic areas of economics and business, not as a substitute for, but as a part of, a broad liberal education. From fifty to sixty percent of the course work taken for the Bachelor of Business Administration degree (a required minimum of 50 percent) is taken in such areas as the humanities, the natural and physical sciences, and the social sciences.

The undergraduate and graduate programs of the college are fully accredited by the American Assembly of Collegiate Schools of Business.

Honors Program

ADMISSION

Lower Division: Incoming freshmen who score at least 26 on the ACT or its equivalent on other tests are invited to participate and are eligible to enroll in the designated honors sections of this college's lower division courses.

Transfer or students presently enrolled in The University of Memphis are eligible to enroll in the designated honors sections of this college's lower division courses if they have a minimum 3.00 grade point average or the recommendation of a faculty member.

Upper Division: To be eligible to enroll in the designated honors sections of this college's upper division courses, students must have a minimum 3.25 grade point average in course work taken in the Fogelman College of Business and Economics and a 3.00 overall grade point average.

RETENTION

The participating honors student must maintain a minimum 3.00 grade point average in lower division and upper division honors courses, have a minimum 3.25 grade point average in all courses taken in the Fogelman College of Business and Economics, and a minimum overall grade point average of 3.00 to continue in the college's Honors Program.

REQUIREMENTS

To qualify for "Honors in Business," in addition to an Honors Thesis, a student must complete successfully a minimum of 18 semester hours from the following:

1. No more than 6 hours from Honors Sections in: ACCT 2010, 2020; ECON 3310, 3320; ISDS 2710, 2711, 2755; or ECON 2110, 2120.

2. At least 12 hours from Honors Sections in: ECON 4111; FIR 3011, 3130, 3410; ISDS 3510; MGMT 3110, MGMT 4710; MKTG 3010; MGMT 3510.

In some circumstances, additional contract work and enrollment in a non-honors section of a required upper division course may be accepted as upper division honors credit. A maximum of 6 hours of upper division honors credit may be contracted.

A minimum grade of B is required in each honors course for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a B.

THESIS

During their senior year, prospective honors graduates must complete successfully an honors thesis, which, in addition to the 18 hours of honors course work, will qualify them to graduate "With Honors in Business." Students will select a major advisor and submit a thesis proposal. This proposal must be approved by the advisor and the Director of the College Honors Program. Upon completing the thesis, the student must submit it for approval to the advisor and the College Director.

CERTIFICATE OF ACHIEVEMENT

Students who complete a minimum of 12 hours in Honors course work with a minimum of 3.25 grade point average and a minimum of B in each of the Honors courses will receive a Certificate of Achievement.

DESIGNATION OF "WITH HONORS IN BUSINESS"

Students who complete 18 hours (meeting the restrictions listed) with an acceptable Honors Thesis and a minimum 3.25 grade point average in all courses taken in The Fogelman College of Business and Economics, and in all Honors courses taken in this college, with a minimum overall grade point average of 3.00 will have earned the designation of "With Honors in Business" which will appear on the transcript and diploma.

ORGANIZATION OF THE COLLEGE

The Fogelman College of Business and Economics comprises The School of Accountancy and five academic departments: Economics; Finance, Insurance, and Real Estate; Management; Management Information Systems and Decision Sciences; and Marketing. These academic units offer a variety of majors and minors, the detailed requirements for which are listed later in this section. The interdisciplinary International Business Program centered in this college offers an undergraduate major in International Business; requirements are listed in the section pertaining to departmental requirements. In addition there are two research units: Bureau of Business and Economic Research and Center for Manpower Studies.

Academic Advising

Every student entering The Fogelman College of Business and Economics will receive advice in the college's Advising Office. The advisor will assist the student in the selection of appropriate courses and provide the opportunity for meaningful discussion regarding career goals, past academic experience and future academic growth and progress as it relates to the student's development. This assistance, however, does not in any way relieve the student of the primary responsibility of studying the *Catalog* and fulfilling all the requirements for the degree.

Intent to Graduate

Intent to graduate forms are filed with the Graduation Analyst in The Fogelman College of Business and Economics. Students must schedule an appointment before the established application deadline published in each current *Catalog* or *Schedule of Classes*. Deadlines are strictly enforced. At this time, an audit of the prospective graduate's academic record is conducted, and the applicant will be provided with an official graduation agreement indicating the remaining degree requirements.

RESIDENCE REQUIREMENTS

Residence requirements for a degree in business administration are as follows: (1) the senior year must be completed at The University of Memphis, (2) at least 33 hours of upper division business courses must be taken at The University of Memphis, and (3) 12 of the 33 upper division business administration hours must be in the major field.

A student transferring credits from a two-year (lower division) college must complete a minimum of 60 semester hours in an accredited senior institution.

Students with transfer credit are required to maintain a 2.0 GPA on all courses taken at The University of Memphis.

MINOR. To earn a minor in this college, a transfer student majoring in one of the other colleges of the university or in this college must earn at The University of Memphis at least 6 upper division business administration hours of the total number of hours required for that minor.

See University Residence Requirements in the *Graduation from the University* section.

TRANSFER CREDIT

The official evaluation and acceptance of transfer credit is the responsibility of the Office of Admissions. The Undergraduate Advising Office of The Fogelman College of Business and Economics, however, will be happy to answer inquiries regarding the applicability of transfer course work for the completion of the B.B.A. degree.

If a student transfers credit in required business courses that are classified as upper division in this college, but were taken as lower division credit or taken at a two-year (lower division) institution, these courses must be *repeated* **or** *validated by examination.* Validated courses are not considered U of M credit and will not count toward hours of residency.

B.B.A. DEGREE REQUIREMENTS

1. To qualify for the Bachelor of Business Administration (B.B.A.) degree, the student must complete a minimum of 132 semester hours (128 hours for Accountancy majors) with a minimum overall grade point average of 2.00 and meet additional grade point average requirements described below.

2. No grade below a "C" and a minimum grade point average of 2.25 (ACCT majors—2.5) is necessary in these lower division courses: MATH 1312, ISDS 2710, 2711, ECON 2110, 2120, ACCT 2010, 2020, ISDS 2749, 2755 (ACCT majors—ACCT 2410). No grade below a "C" and a minimum grade point average of a 2.25 is necessary for these upper division courses: FIR 3011, 3130, 3410, MGMT 3110, 3510, 4710, ISDS 3510, MKTG 3010, and the International Business course.

3. A minimum of 50% (66 hours) of the 132 hours required for the degree must be B.B.A. general education hours. (A minimum of 64 hours is required for ACCT majors) Note: Included in these B.B.A. General Education requirements are ECON 2110, 2120, 4111, ISDS 2710, and 2711.

4. B.B.A. students may apply no more than two semester hours of physical activity courses to the minimum degree requirements of 132 semester hours.

5. All courses used to satisfy specific degree requirements of this college must be taken on a "letter grade" OR "credit by examination" basis. Hours earned on a "credit/no credit" basis are accepted only in courses designated as electives in the student's degree program. Courses taken on an "audit" basis cannot be used to satisfy college requirements.

6. The computer literacy requirement will be met by successfully passing ISDS 2749 (Introduction to Business Microcomputer Applications), ISDS 2755 (Introduction to Management Information Systems) and other required Business Administration core courses. Students in The School of Accountancy will meet the computer literacy requirement by passing ACCT 2410.

7. In the B.B.A. degree, the following courses are used to meet General Education computation and writing intensive and integrative requirements. Credit by exam is not available for these courses:

Computation Intensive: ECON 4111.

Writing Intensive: MGMT 3510.

Integrative: MGMT 4710.

General Requirements

The college curriculum is organized into a lower division and an upper division:

THE LOWER DIVISION (LD) comprises the freshman and sophomore years, the first four semesters of university work. Courses offered in the lower division are numbered from 1000 through 2999, and the student must register consistently for all lower division requirements until they are completed.

ADMISSION TO DEGREE PROGRAM:

To continue into the upper division business courses, all students seeking a degree in the Fogelman College of Business and Economics must (1) complete the following courses with no grades below a 'C' and a minimum 2.25 G.P.A. (2.5 G.P.A. for Accounting majors): MATH 1312, ECON 2110, 2120, ISDS 2710, 2711, ACCT 2010, 2020, ISDS 2749, 2755 (ACCT majors must take ACCT 2410); (2) have accumulated 55 hours of course work including the required 9 hours of English; MATH 1312; ECON 2110, 2120; ISDS 2710, 2711; ACCT 2010, 2020; and ISDS 2749, 2755 (ACCT majors must take ACCT 2410).

THE UPPER DIVISION (UD) comprises all junior and senior years of undergraduate work; courses offered in the upper division are numbered 3000 through 4999.

RETENTION:

To graduate from the Fogelman College of Business and Economics, all students must have a minimum of a 'C' and a 2.25 G.P.A. in the following courses: FIR 3011, 3130, 3410, MGMT 3110, 3510, 4710, MKTG 3010, ISDS 3510, and the International Business course. All major courses require a grade of at least a 'C'.

Enrollment Priority

Neither admission by The University of Memphis and The Fogelman College of Business and Economics nor completion of the minimum requirements guarantees admission to any specific course offered by the college. Limited resources may require that enrollment in business classes be based on ranking by Grade Point Average with exceptions being made for graduating seniors.

I. B.B.A. GENERAL EDUCATION

(66 hours minimum)
(64 hours minimum for ACCT majors)

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Quantitative and Analytical Reasoning:

Lower Division (9-12 hours): MATH 1312 (Note: Students who have not had the prerequisite for MATH 1312 take MATH 1211 as a non-business elective), ISDS 2710, 2711

Upper Division (3 hours): ECON 4111 **[C]**

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage: (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405; SOCI 3422.

Social Science (6 hours): ECON 2110, 2120, with a minimum grade of C in each course.

Natural Science (8 hours—Sequence required): BIOL 1071, 1072, 1081, 1082; BIOL 1151, 1152, 1161, 1162; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1001, 1011, 1002, 1022; GEOL 1101, 1103; PHYS 1001, 1010, 1002, 1020; PHYS 2003, 2510, 2004, 2520; or UNIV 1610, 1611.

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121). NOTE: Only 2 semester hours of physical activity may be counted toward the minimum 132 hours required for the B.B.A.

Non-Business Electives (lower division or upper division to bring the total of non-business hours earned to 66. (64 hours for ACCT majors) Note: Economics courses other than the required courses of ECON 2110, 2120, and 4111 will not count as non-business course work.)

II. LOWER DIVISION BUSINESS CORE CURRICULUM

(9-10 hours)

ACCT 2010 Fundamentals of Accounting I (3)

ACCT 2020 Fundamentals of Accounting II (3)

ISDS 2749 Introduction to Business Microcomputer Applications (1)

ISDS 2755 Introduction to Management Information Systems (3)

Note: Accounting majors must take ACCT 2410 (3) in lieu of ISDS 2749, 2755

III. UPPER DIVISION BUSINESS CORE CURRICULUM

(27 hours)

No grade below C and 2.25 GPA in the following courses:

FIR 3011 Business Law (3)

FIR 3130 Legal, Social, and Political Environment of Business (3)

FIR 3410 Business Finance (3)

MGMT 3110 Organization and Management (3)

MGMT 4710 Business Policy (3) **[I]** (Enrollment usually limited to graduating seniors)

MKTG 3010 Principles of Marketing (3)

MGMT 3510 Business Communications (3) **[W]**

ISDS 3510 Production and Operations Management (3)

Choose One: MGMT 4810, International Management (3); MKTG 4530, International Marketing (3); ECON 4350, International Economics (3); FIR 4550, International Finance (3); MGMT 4510, International Business Communication and Negotiation (3); MKTG 4570 Import/Export Marketing (3); ECON 4351. International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the student's advisor.

(Transfer students are referred to the section Transfer Credit)

IV. THE MAJOR

Each student, with the assistance of an advisor in the college, not later than the beginning of the junior year, will select a major and, if available, an area of concentration within the major. The specific courses required by each department for the satisfaction of its major are listed in the section following. A major requires a minimum of 21 hours beyond upper division core requirements, and courses used to satisfy one major may not be used toward a second major. A minimum grade of *C* must be earned for each required course for the major.

V. GENERAL ELECTIVES

Student will take lower division or upper division business or non-business courses sufficient to bring the total to 132 semester hours for the degree (128 hours for Accountancy majors).

VI. COURSES NOT APPLICABLE TOWARD B.B.A. DEGREE

Remedial and Developmental Studies (R&DS) courses may not be used to fulfill the minimum number of hours required for the B.B.A. degree.

VII. THE MINOR

A student whose major is within The Fogelman College of Business and Economics is not required to have a minor; however, such an option is available. A minimum grade of C must be earned for each required course in the lower division and upper division business administration core curriculum and in each course required for the minor.

A student whose major is within one of the other colleges of the university may take a *minor* in one of the departmental areas. (See Residence Requirements for The Fogelman College of Business and Economics.)

SCHOOL OF ACCOUNTANCY

The mission of the bachelor's degree program in The School of Accountancy is to serve the needs of students, the accounting profession, and the general business community through teaching, research and service. Within this mission, the school offers students a balanced integrative approach to business education. In this interdisciplinary view, students must have a broad general education grounded in non-business courses, a strong supporting business acumen, and an interrelated view of accounting to the other areas of business. Specifically, accounting classes synthesize accounting with the financing, investing, and operating functions so that students can develop their critical thinking skills and apply them to making decisions on accounting and other business problems. Overall, the B.B.A. with a major in Accounting is built on the foundation of technical, interpersonal, and communication skills. This focus allows enhancement of careers and leadership to businesses and government units that would strengthen the economic development of communities, state, and nation.

REQUIREMENTS FOR MAJOR AND MINOR

Program Options: The School of Accountancy offers undergraduates two program options. One option is to complete only the 128 semester hours which lead to the B.B.A. degree with a major in accountancy. The other option is the recommended curriculum for students interested in a professional career in accounting. It is a 158-hour professional program in accounting that combines undergraduate and master's degrees. Undergraduate B.B.A. students may begin taking graduate course work after they have completed 90 undergraduate credit hours, providing they have (1) a minimum GPA of 3.25, (2) a minimum 450 GMAT score, and (3) and minimum average GPA of 3.25 in ACCT 3110, 3120, and 3310. Students pursuing this option receive the bachelor's degree upon completion of the bachelor's requirements and the master's degree with a major in accounting upon completion of the full 158 semester hours. A student admitted to the professional program may take graduate courses only if she or he has completed the necessary prerequisites. Graduate courses may not be double counted for both the bachelor's and master's degrees. (See also section 2 of the current bulletin, *Services to Students-Combination Senior.)*

Degree: The B.B.A. degree with a major in accountancy requires a minimum of 128 semester hours.

The Major: ACCT 2410 and 22 upper division semester hours in accounting courses as follow:

ACCT 3110, 3120, 3310, 3510, 4020, 4240, 4721, and an accounting elective.

The Minor:

For students whose major is in another college of the university (18 hours): ACCT 2010, 2020, 2410, 3010, 3110; plus one of the following: 3120, 3310, 3510.

For students whose major is in a department in The Fogelman College of Business and Economics (15 hours): ACCT 2410, 3110, 3120, 3310, 3510.

TYPICAL SEQUENCE

FRESHMAN YEAR			
ENGL 1101	3	ENGL 1102	3
[1]Natural Science	4	[1]Natural Science	4
[1]Fine Arts	3	MATH 1312	3
[3]Elective (Non-Bus.)	3	[1]American Heritage	3
[1]Hist/Phil Heritage	3	[1]Hist/Phil Heritage	3
HPER 1100	2	Physical Activity	2
	18		18

SOPHOMORE YEAR			
ACCT 2010	3	ACCT 2020	3
ENGL 2201 OR 2202	3	[1]American Heritage	3
COMM 2381	3	ECON 2120	3
ECON 2110	3	ACCT 2410	3
ISDS 2710	3	ISDS 2711	3
	15		15

JUNIOR YEAR			
ACCT 3110	3	ACCT 3120	3
ACCT 3310	3	Elective	3
FIR 3011	3	FIR 3130	3
ISDS 3510	3	FIR 3410	3
MKTG 3010	3	MGMT 3110	3
	15		15

SENIOR YEAR			
4XXX (Bus. Course)	3	ACCT 4240	3
ACCT 3510	3	ACCT Elective	3
ACCT 4020	3	MGMT 4710 **[I]**	3
ECON 4111 **[C]**	3	ACCT 4721	1
MGMT 3510 **[W]**	3	[2]International Business	3
Elective	1	Elective	3
	16		16

[1] See Fogelman College of Business and Economics Non-Business curriculum (General Education) requirements for acceptable courses.

[2] Students must select one of the following: ECON 4350, 4351; FIR 4550; MGMT 4510, 4810; MKTG 4530.

[3] If student does not have the prerequisite required for MATH 1312, the student should take MATH 1211 as this elective.

DEPARTMENTAL REQUIREMENTS FOR MAJORS AND MINORS

Department of Economics

The Department of Economics has two major objectives: to prepare students majoring in economics by providing a solid foundation in the principal areas of economics and to function as a service department for other departments in The Fogelman College of Business and Economics, as well as the other colleges of the university.

In general, the department attempts to give economics majors a solid background in economic theory, quantitative economics and applied economics.

ECONOMICS

The Major (B.B.A.): A minimum of 21 upper division semester hours in courses as follows:

ECON 3310, 3320, 4920 and four additional upper division courses selected with the approval of the department advisor.

The Major (B.A., College of Arts and Sciences): The student is required to meet the requirements for the Bachelor of Arts degree plus these specific major requirements:

ECON 2110, 2120, 3310, 3320, 4920, and five additional upper division courses, for a total of 30 semester hours, selected with the approval of the department advisor.

The Minor:

For students whose major is in another college of the university: 18 semester hours in economics courses, including ECON 2110, 2120, and 12 additional upper division hours in courses as approved by the department advisor.

For students whose major is in another department in The Fogelman College of Business and Economics: Nine additional upper division hours in economics approved by the department advisor.

Honors Program:

All students who receive a grade of B or better in ECON 2110 or 2120 honors sections are eligible for the program. Entry to the program can also be obtained through the recommendation of a member of the faculty to the Economics Departmental Honors Committee. A student must maintain an average grade of at least 3.25 in economics to continue in the program and must have an average grade of 3.5 or better in economics to graduate with honors in economics. Honor students take special courses during the junior and senior years, particularly the honors sections of ECON 3310 and 3320, and write a senior research paper. At commencement they are awarded the special distinction "with honors in Economics." Details of the program are available at the Economics Department office.

Department of Finance, Insurance, and Real Estate

The primary objective of the department is to provide the basic concepts, principles and analytical tools essential for business decisions in the fields of finance, insurance and real estate. The department curriculum is designed to provide a broad background for effective functioning within each discipline or in related business and governmental fields. More specifically:

(1) Finance majors study the environment, theory and techniques of decisions on the acquisition and allocation of funds by business firms, including the applied areas of investment and financial institutions.

(2) Risk management and insurance majors study risk theory, risk management; life, health, and property-liability insurance and their relationships to other disciplines in business administration.

(3) Real Estate majors will be provided the basic theories and practices of urban land use and economics. Exposure will be to real estate principles, valuation, investment analysis and finance, legal environment, and development.

FINANCE

The Major: A minimum of 21 upper division semester hours in courses as follows:

FIR 3710, 3720 ,4440, 4610, and nine additional upper division hours in courses selected with the approval of the advisor.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: Nine upper division hours in finance approved by the department chair.

For students whose major is within another college of the university: (24 hours) ACCT 2010 and 2020; ECON 2110, 2120, 3610; FIR 3410, 3710. Three additional upper division hours approved by the department chair.

RISK MANAGEMENT AND INSURANCE

The Major: A minimum of 21 upper division semester hours in courses, as follows:

FIR 3810, 4810, 4820, 4870, and a minimum of nine additional upper division hours in courses selected with the approval of the advisor.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: (9 hours) FIR 3810, 4870 and three additional upper division hours in insurance approved by the department chair.

For students whose major is within another college of the university: (21 hours) ACCT 2010, ECON 2110, ISDS 2710, FIR 3011, 3810, 4870, and three additional upper division hours in insurance or finance approved by the department chair.

REAL ESTATE

The Major: A minimum of 21 upper division semester hours in courses, as follows:

FIR 3310, 4310, 4320, 4340, 4350, and a minimum of 6 additional upper division hours in courses selected with the approval of the advisor.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: (9 hours) FIR 3310 and six additional upper division hours in real estate approved by the department chair.

For students whose major is within another college of the university: (21 hours) ACCT 2010; ECON 2110; FIR 3011, 3130, 3310, and six additional upper division hours in real estate approved by the department chair.

Department of Management

The effective manager of today must have competence in many disciplines, an understanding of a wide variety of relationships, and the ability to analyze evolving management requirements. Regardless of the functional specialty, the professional manager must also be a leader of people who knows how to organize and motivate groups of people serving the goals of the organization.

Effective adaptation of management to such emergent conditions as the continued growth of science and technology, populations, and large scale organization demands a thorough grasp of management process theory including planning, organizing, directing, and controlling of operations.

The management major is designed to provide students with a basic understanding of management concepts, theories and principles which will be useful in all kinds of organizations. All management majors take courses in management principles, business communication, human resources administration, organizational behavior, international management, and strategic management. These courses and others are designed to develop knowledge of organizations and administrative processes and enhance skills in interpersonal relations, written and oral communication, and work project development and completion. The program in management is intended to promote the development of general knowledge and skills which can be applied in virtually any organizational setting and which will continue to be important in the future. In addition to required core courses in management, students select among several more specialized courses to complete their majors.

MANAGEMENT

The Major: A minimum of 21 upper division semester hours including MGMT 3215, 4420, and either MGMT 4510 or MGMT 4810 (If either MGMT 4510 or MGMT 4810 is used to fulfill a college core requirement, the student must take the other course to fulfill the major requirement.)

The additional 12 hours of the 21 hour minimum for the major can be selected from the following: MGMT 4240, 4251, 4260, 4410, 4510, 4810, 4820, 4910, 4110-19.

The Minor

For students whose major is in another area in The Fogelman College of Business and Economics (12 hours): MGMT 3215, 4420, and 6 upper division semester hours in management.

For students whose major is within another college of the university (18 hours): MGMT 3110, 3215, 4420; ISDS 3510; and 6 upper division semester hours in Management.

Department of Management Information Systems and Decision Sciences

Managers and nonmanagers alike depend upon information for decision making. To be useful that information must be understandable, timely, thorough, focused on the decision at hand, and in the hands of the appropriate individual. Accomplishing all this is the challenge of Management Information Systems and the Decision Sciences. It requires a knowledge of individual and/or group behavior, the process of perception (how people select and interpret information), the decision tools they need, computers and communication technology, systems design, managing data, and the impact individual decisions have on the organization.

Management Information Systems and the Decision Sciences include several specialized areas including Artificial Intelligence, Expert Systems, Telecommunications, Cognitive Processing, Production/Operations Management, Management Science, Decision Support Systems, Management Information Systems Planning, Decision Theory, Statistics, Data Base Management, Office Automation, and general applications of computers and microcomputers to business.

Many Management Information Systems and Decision Science courses require substantial hands-on experience in computer labs. Therefore, the department does not allow credit by examination for upper division courses.

MANAGEMENT INFORMATION SYSTEMS

The Major: ISDS 2770 and a minimum of 21 upper division hours, including ISDS 3745, 3770, 3775, 3790 and 4800. The additional six hours will be satisfied by either (1) ISDS 3755 and ISDS 3780, or (2) ISDS 3755 and COMP 4262, or (3) ISDS 4760 and ISDS 4795

ISDS 2770 must be completed prior to taking any upper division courses in the major.

The Minor:

For students whose major is in another area in the Fogelman College of Business and Economics (12 hours): ISDS 3770, 3775, 3790, 4800.

For students whose major is within another college of the university (16 hours): ISDS 2749 (1), 2755, 3770, 3775, 3790 and 4800.

PRODUCTION OPERATIONS MANAGEMENT

The Major: (21 hours) ISDS 4510, 4511, 4512; MKTG 3610 and three of the following: TECH 4462, 4464, 4466; ISDS 3760; MKTG 3620, 4220; MGMT 4420.

The Minor:

For students whose major is in another area in the Fogelman College of Business and Economics: (9 hours) ISDS 4510, 4511, and 4512.

For students whose major is in another college of the university: (24 hours) MGMT 3110; ISDS 2710, 2711, 3510, 4510, 4511, 4512. Three additional upper division hours approved by the department chair.

Department of Marketing

The objective of the Department of Marketing is to provide a broad view of the marketing process and to develop an understanding of all the factors involved in the marketing of goods and services. Students may select from three majors:

(1) Marketing Management majors study the practical application of marketing concepts, including procedures for developing promotion, pricing, distribution, and sales management strategies. Additionally, instruction is provided in market research, buyer behavior issues, and a variety of market programming topics.

(2) Sales majors are taught practical and theoretical sales and sales management skills. Particular emphasis is placed on interpersonal communication techniques and on the practical application of the marketing concepts as they apply to sales and sales management.

(3) Logistics/Marketing majors study the details of logistics management as well as an analysis of the political and competitive environment in which logistics practitioners must function. Additionally, numerous distribution functions such as warehousing, inventory management, order processing, and distribution planning are covered.

MARKETING MANAGEMENT

The Major: a minimum of 21 upper division semester hours in marketing courses as follows:

MKTG 3012, 3140, 3610, 4080, 4901, and six semester hours chosen by the student from the following: MKTG 3170, 3320, 3620, 4220, 4230, 4240, 4410, 4470, 4530, 4570, 4790, 4920-29.

The Minor:

For students whose major is in another college of the university: (24 hours) ACCT 2010; ECON 2120; and MKTG 3010, 3012, 3140, 3610, and six semester hours chosen by the student from the following: MKTG 3170, 3320, 3410, 3620, 4220, 4230, 4240, 4410, 4470, 4530, 4570, 4790, 4920-29.

For students whose major is in another area in The Fogelman College of Business and Economics (12 hours): MKTG 3012, 3140, 3610, and three semester hours chosen by the student from the following: MKTG 3170, 3320, 3620, 4220, 4230, 4240, 4410, 4470, 4530, 4570, 4790, 4920-29.

SALES

The Major: a minimum of 21 upper division semester hours in marketing courses as follows: MKTG 3410, 4080, 4410, 4490, 4901, and six semester hours chosen by the student from the following: MKTG 3012, 3140, 3320, 3610, 4220, 4240, 4470, 4790.

The Minor:

For students whose major is in another college of the university (24 hours): ACCT 2010; ECON 2120; MKTG 3010, 3410, 4410, 4490, and six semester hours chosen by the student from the following courses: MKTG 3012, 3140, 3320, 3610, 4220, 4240, 4470, 4790.

For students whose major is in another area in The Fogelman College of Business and Economics (12 hours): MKTG 3410, 4410, 4470, and 4490.

LOGISTICS/MARKETING

The Major: a minimum of 21 upper division semester hours in marketing courses as follows: MKTG 3610, 3620, 3630, 4080, 4901, and six semester hours chosen by the student from the following courses: MKTG 3012, 3320, 4220, 4470, 4570, 4620, 4790.

The Minor:

For students whose major is in another college of the university (24 hours): ACCT 2010, ECON 2120, MKTG 3010, 3610, 3620, 3630, and six semester hours chosen by the student from the following: MKTG 3012, 3320, 4220, 4470, 4570, 4620, 4790.

For students whose major is in another area in the Fogelman College of Business and Economics (12 hours): MKTG 3610, 3620, 3630, and three semester hours chosen by the student from the following: MKTG 3012, 3320, 4220, 4470, 4570, 4620, 4790.

Program in International Business

The primary objective of the International Business Program is to provide a broad interdisciplinary background for a career in international business. Through the study of theoretical and practical aspects of the operations of international and multinational business and through work in several liberal arts disciplines, the graduate of this program should be prepared, after receiving a minimum orientation training in a particular international firm, to apply the knowledge acquired to the solution of problems faced by the company.

For further information concerning this program, contact the Advising Office, The Fogelman College of Business and Economics.

INTERNATIONAL BUSINESS

The Major:

The student majoring in International Business must complete the same courses required of all students working toward the B.B.A. degree. For additional requirements during the sophomore and junior years, see the International Business advisor. Students majoring in International Business are required to take six credit hours in foreign language. It is also strongly suggested that the students take more than six hours.

In the senior year, the student will take 21 semester hours in courses offered by The Fogelman College of Business and Economics, distributed as follows:

15 semester hours (5 courses) from the following group: ECON 3580, 4340, 4350, 4351; FIR 4550; MGMT 4510, 4810; MKTG 4530, 4570.

6 semester hours (2 courses) from the following group: ECON 4120; FIR 4440; ISDS 3760, MKTG 4080.

Two courses from the College of Arts and Sciences are also required in the senior year. See the advisor.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: Nine hours from the following courses with the approval of the International Business advisor: ECQN 4340, 4350, 4351; FIR 4550; MGMT 4810; MKTG 4530.

For students whose major is in another college of the university: The student will take a minimum of 18 hours in The Fogelman College of Business and Economics, at least 9 hours of which must be chosen from the following: ECON 4340, 4350, 4351; FIR 4550; MGMT 4810; MKTG 4530.

The necessary prerequisites for the above courses are in parentheses below:

ECON 4340 (ECQN 2110); ECQN 4350 (ECON 2120); FIR 4550 (FIR 3410); MGMT 4810 (MGMT 3110); MKTG 4530 (MKTG 3010).

Pre-Professional Business Administration Minor

The Fogelman College of Business and Economics offers a pre-professional minor (31 hours) for students whose major is in another college of the university. Requirements are as follows:

ACCT 2010, 2020; ECON 2110, 2120; ISDS 2710, 2749, 2755; FIR 3130, 3410; MGMT 3110; MKTG 3010. Accounting, economics, and junior standing are prerequisites for 3000 level courses.

School of Accountancy Course Descriptions

CRAIG J. LANGSTRAAT, LL.M., C.P.A.
Interim Director, School of Accountancy
Room 200A, Fogelman Business and Economics Building
http://www.people.memphis.edu/~dspice/accountancy.html

RONALD H. EATON, Ph.D., C.P.A.
Coordinator, General Accounting

JOHN M. MALLOY, Ph.D., J.D., C.P.A.
Coordinator, Taxation

PETER L. McMICKLE, Ph.D., C.P.A.
Coordinator, Accounting Information Systems

In addition to specific prerequisites, junior standing or permission of the school director is a prerequisite for all 3000 and 4000 level courses in The Fogelman College of Business and Economics.

Courses in the School of Accountancy numbered from 3110 to 4911 are open only to students fully admitted to the School of Accountancy, or with the permission of the School Director or designate.

ACCOUNTANCY (ACCT)

2010. Fundamentals of Accounting I. (3). Introduction to measurement, realization, classification and disclosure concepts about businesses' financial statement. Emphasis on how managers, creditors, and investors can analyze financial accounting information to make investment, financing, and operating decisions.

2020. Fundamentals of Accounting II. (3). Introduction to measurement and disclosure concepts about cost and profit of products, services, and organizational units. Emphasis on how managers can use internal and external information to make resource allocation decisions, to plan and to control investment and make operating decisions.

2410. Computer Applications in Accounting. (3). Introduction to the major concepts and issues in management and accounting information systems. Hands-on learning of computer applications in accounting including spreadsheet modeling, introduction to database, and word processing. PREREQUISITE OR COREQUISITE: ACCT 2020.

2610. Personal Accounting and Tax Preparation for Non-Accountants. (3). Use of computers to plan and maintain personal or small business financial records and to prepare personal tax returns. *Unavailable to students majoring in accounting.*

3010. Managerial Accounting. (3). Accounting as it relates to managerial control. Includes financial statement analysis including price level changes, cost controls, budgeting, quantitative accounting techniques for decision making in management. PREREQUISITE: ACCT 2020. This course is for non-accounting majors only.

3110. Intermediate Accounting I. (3). Review of accounting process and financial statements; cash; receivables and short-term investments; inventories; investments in equity securities, income recognition; operational assets; intangibles. PREREQUISITES: ACCT 2020.

3120. Intermediate Accounting II. (3). Long-term debt; corporations, formation and changes after formation; retained earnings; investments in debt instruments; statement of cash flows; pensions; leases; E.P.S.; deferred income taxes; accounting changes; financial reporting and changing prices. PREREQUISITE: ACCT 3110.

3310. Cost Accounting. (3). Cost systems, including job order, process, and standard, as management information systems for planning and control. Allocation of indirect costs, preparation of variable budgets, and determination of standard cost variances and their meaning. PREREQUISITES: ACCT 2020, 2410.

3510. Federal Income Tax I. (3). Introduction to the federal income taxation of individuals.

4020. Accounting Systems. (3). (4450). Accounting systems analysis and design emphasizing the accounting cycles approach. Theory of systems control in an organizational setting. Students implement a holistic approach of synthesizing the accounting, financing, operating, and production functions where applicable. On-site practicum with an actual company. PREREQUISITES: ACCT 3310.

4210. Advanced Accounting. (3). Partnerships, statement of affairs, receiver's accounts, statement of realization and liquidation, business combinations and consolidated financial statements, fund accounting, international accounting. *Enrollment restricted to students who are governed by catalogs prior to 1993-1994.* PREREQUISITE: ACCT 3120.

4240. Auditing. (3). Ethics in accounting practices, internal control, auditing standards and procedures, programs of audit of various accounts, reports to clients. PREREQUISITE: ACCT 3120, 4020.

4241-6241. Advanced Auditing. (3). (0551). In-depth background in three technical areas of auditing: statistical plans, selection techniques, and statistical measurement. Analytical review techniques. EDP auditing. PREREQUISITE: ACCT 4240.

4300. Financial Statement Analysis. (3). Comprehensive and up-to-date treatment of analysis of financial statements in assessing an organization's risk in decision making. PREREQUISITE: ACCT 2020.

4310. Advanced Cost Accounting. (3). Budgets, determination of standards, variances and their functions, cost reports, profit projecting, direct costing, gross profit and break-even analysis, cost-profit-volume analysis, capital expenditure control, comparative cost analysis. *Enrollment restricted to students who are governed by catalogs prior to 1993-1994.* PREREQUISITE: ACCT 3310.

4410. Advanced Computer Applications In Accounting. (3). Advanced techniques for the use of computer application packages and programming in such areas as financial modeling, financial analysis, productivity, and presentation as well as other applications of current and anticipated interest and benefit to the accounting profession. *Enrollment restricted to students who are governed by catalogs prior to 1993-1994.* PREREQUISITES: ACCT 2410 or equivalent.

4520-6520. Federal Income Tax II. (3). Introduction to the federal income taxation of corporations, partnerships, estates and trusts. PREREQUISITE: ACCT 3510.

4540. Governmental, Health Care/Not-for-Profit Accounting. (3). Basic accounting and reporting procedures for governmental units, universities and other not-for-profit entities. PREREQUISITE: ACCT 2010.

4721. Senior Accounting Symposium. (1). Oral communication, including the environment of business and accounting ethics.

4910. Problems in Accounting. (1-3). Students will conduct approved projects in major area under supervision of faculty. PREREQUISITE: Permission of school director.

4911. Internship in Accounting. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved, supervised by department faculty member. Credit allowed only after acceptance of report, varies with complexity of duties. PREREQUISITES: senior standing and a minimum GPA of 2.75.

4920-29. Special Topics in Accounting. (3). Varied topics. *May be repeated once with change in topic.* PREREQUISITE: consent of Director of School of Accountancy.

4996. Senior Honors Thesis in Accountancy. (3). Independent research open only to those students enrolled in the honors program. Thesis supervised by faculty member; approved by the Director of the School. PREREQUISITES: senior standing and permission of the director of the college honors program.

Business and Economics Course Descriptions

BUSINESS ADMINISTRATION (BA)

Students must have junior standing and have met specific course prerequisites with a grade of C or better to be eligible for all 3000- and 4000-level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of C in each; (2) minimum of 2.25 GPA in all required lower division business courses and MATH 1312, and (3) 55 hours of coursework including MATH 1312 and 9 hours of English *(See B.B.A. Degree Requirements—General Requirements).*

4900. Practicum In Research. (1-3). Actual problem-solving research activities in business and economics. Student assigned to project either being conducted currently by faculty member or one developed under supervision of faculty member. Whenever possible, project within student's major field of study. PREREQUISITE: senior status.

4911. Internship In International Business. (1-6). (4000). Practical operations of international business. Students placed for 1-8 month period with cooperating business firm operating in fields of international banking and finance, transportation, management, marketing or accounting. Academic credit granted upon certification of satisfactory performance by cooperating business firm and upon acceptance by faculty of written research report by student.

ECONOMICS

PROFESSOR
DAVID M. KEMME, Ph.D., *Interim Chair*
Room 400, Fogelman Business and Economics Building
http://economics.memphis.edu/

Students must have junior standing and have met specific course prerequisites with a grade of C or better to be eligible for all 3000- and 4000-level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of C in each; (2) minimum of 2.25 GPA in all required lower division business courses and MATH 1312, and (3) 55 hours of coursework including MATH 1312 and 9 hours of English (See *B.B.A. Degree Requirements—General Requirements*).

ECONOMICS (ECON)

2110. Introduction to Macroeconomics. (3). Nature and functions of the national economy in a global context. Includes consumption and investment behavior, national income and product determination, fiscal and monetary policy, and international trade. **[G]**.

2120. Introduction to Microeconomics. (3). Operation of the market economy at the individual and firm level. Includes supply and demand analysis, consumer behavior, behavior of firms in both competitive and monopoly environments, income distribution theory, and effects of government intervention in the market economy. **[G]**.

3020-29. Special Topics in Economics. (3). Current economic issues and problems in the United States. Emphasis on application of tools and analytical methods. PREREQUISITES: ECQN 2110, 2120.

3210. Labor Economics. (3). Introduction to institutional aspects of American labor force and its organization wage and employment theory, economic role of collective bargaining, and basic ingredients of public policy toward labor organization. PREREQUISITE: ECQN 2120.

3310. Microeconomic Theory. (3). Intermediate approach to price theory. Stress on market mechanism as device for resource allocation; attention to uses of basic microeconomic concepts in analysis of economic problems and in formulation of policy. PREREQUISITE: ECQN 2120.

3320. Macroeconomic Theory. (3). Intermediate approach to social income accounting and to functional relationships between important aggregate economic variables as well as to forecasting and social policy implications. PREREQUISITE: ECQN 2110.

3411. Economics of Social Issues. (3). Applications of economic theory and analysis to current social problems, and evaluation of current and potential policy solutions to social issues.

3580. International Economic Development—An Ecological Perspective. (3). Process of economic development as adaptive interplay between man's needs and ways in which environment is exploited to satisfy those needs in both developed and less developed countries. PREREQUISITE: ECQN 2110 or consent of instructor.

3610. Money and Banking. (3). Monetary and banking history of leading countries with special emphasis on theory of money and banking in United States, deposit and earnings operations of individual banks, interbank and central bank relations. PREREQUISITE: ECON 2110.

4040. Economic Analysis of Law. (3). Evaluation of economic effects of both existing and proposed laws. Specifically, to model transactions that occur in changing legal environment and then to estimate impact of changes in legal position on outcomes of voluntary transactions. PREREQUISITE: ECQN 2120.

4111. Managerial Economics. (3). Direct application of economics to common business problems. Economic framework and empirical techniques of production and cost analysis, project evaluation, pricing, and demand analysis. PREREQUISITES: MATH 1312, ECON 2120, ISDS 2711, 2749, 2755. **[C]**.

4120. Economic Forecasting. (3). Current economic thinking on problems of recession and inflation as background to economic forecasting. Methodologies of forecasting analyzed with examples of each. PREREQUISITE: ISDS 2711 or equivalent.

4130-6130. Government Regulation of Business. (3). Approaches to legal and legislative control of business—especially tax laws, commission regulations, and antimonopoly legislation—in view of impact of each on industrial operating policy. PREREQUISITE: ECON 2120.

4260. Environmental Economics and Policy. (3). Economic analysis of environmental problems and various techniques that can be implemented in their resolution (pollution taxes, sale of pollution rights, regulation and outright prohibition); complex interaction of environmental degradation, population explosion and economic progress. PREREQUISITE: ECQN 2120 or consent of instructor.

4313. Economic Strategies Under Uncertainty. (3). Introduction to analytical methods of game theory developed by economists as they apply to making business decisions in an uncertain economic environment where competitors' decisions are interdependent. PREREQUISITE: ECON 2120.

4340. Comparative Economic Systems. (3). Factors contributing to differential performance of economic systems, including property rights, information flow, incentive structure, management-labor relations, government policies on technology and competitiveness. Emerging trends of system convergence and corporate globalization. PREREQUISITE: ECQN 2120.

4350. International Economics. (3). Historical approach to theory of international trade; consideration given to Classical, Neo-Classical and Modern approach to trade theory with emphasis on policy implications of the analysis. PREREQUISITE: ECON 2120 or equivalent.

4351. International Monetary Economics: Theory and Policy. (3). Open economy macroeconomics. Includes examination of payments among nations, foreign exchange markets, determinants of exchange rate policies. National income and foreign exchange, internal and external balance and international factor movements. PREREQUISITE: ECQN 2110.

4410. Development of Economic Thought. (3). Historical development of economic thought. Attention primarily on emergence of Classical and Neoclassical thought, several dissident schools of thought, and twentieth-century economic thought. PREREQUISITE: ECQN 2110.

4740. Health Care Economics. (3). Topics include unique nature of health care as economic good, health care market and its participants including patients, physicians, and hospitals, and financing and delivery of personal health care in United States and other countries.

4810-6810. Quantitative Economic Analysis. (3). Introduction to application of mathematical tools in economics. Optimization with and without constraints. Comparative analysis in economics.

4820. Econometrics. (3). Introduction to statistical procedures used to estimate and test quantitative economic theories, using microcomputer software for regression analysis.

4910. Problems In Economics. (1-3). Students investigate issues surrounding selected economic problems and develop reports of that investigation. *May be repeated to maximum of 3 hours credit.* PREREQUISITES: upper division standing and approval of undergraduate coordinator.

4911. Internship In Economics. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITES: senior standing and minimum GPA of 2.75.

4920. Senior Seminar In Economics. (3). Coordinated by department chair and conducted by selected members of department. To integrate several fields and course areas pursued by undergraduate majors into meaningful whole. Required of all departmental majors in their last year of undergraduate enrollment. **[I]**.

4996. Honors Thesis In Economics. (3). Independent research open only to students enrolled in Economics Department Honors Program. Honors thesis supervised by three-faculty committee selected by student and approved by Economics Honors Committee. PREREQUISITE: permission of Economics Department Honors Committee.

FINANCE, INSURANCE AND REAL ESTATE

PROFESSOR
MARS A. PERTL, *Chair*
Room 402A, Fogelman Business and Economics Building

Students must have junior standing and have met specific course prerequisites with a grade of C or better to be eligible for all 3000- and 4000-level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of C in each; (2) minimum of 2.25 GPA in all required lower division business courses and MATH 1312, and (3) 55 hours of coursework including MATH 1312 and 9 hours of English (See *B.B.A. Degree Requirements—General Requirements*).

FINANCE, INSURANCE AND REAL ESTATE (FIR)

2220. Personal Financial Management. (3). Nontechnical dealing with broad areas of budgeting, insurance, borrowing and credit purchases, home

ownership, investment, taxes, and family financial planning. NOTE: *If taken after student has received credit for FIR 3710 or 3810, credit will not count for BBA degree.*

3011. Business Law. (3). Elements of law and legal principles encountered in business. Emphasis on basic law of contracts, sales and secured transactions, negotiable instruments, real and personal property, agency, forms of business organization, suretyship, insurance contracts and torts.

3130. The Legal, Social, and Political Environment of Business. (3). Emphasis on legal, social, and political environment in which business and its executives exist. Legal, social, and political forces that affect business operations. Lectures and case discussions.

3220. Personal Investing. (3). To assist individual investors of all backgrounds in development and monitoring of an investment portfolio by explaining possible investment alternatives including terminology and analysis techniques to fulfill future financial goals. NOTE: *If taken after student has received credit for FIR 3710 or 3810, credit will not count for B.B.A. degree. This course may not be counted for fulfilling the requirements for the Finance major.*

3310. Real Estate Principles. (3). Basic terminology, principles and issues. Topics include market analysis, real estate law, instruments, legal descriptions, appraisal, investment, finance, brokerage, property management. Designed for non-real estate majors as well as a foundation for further study.

3410. Business Finance. (3). Fundamentals of business finance. Topics include time value of money, capital budgeting techniques, securities valuation, and cost of capital. PREREQUISITES: ACCT 2020, ECON 2120, ISDS 2710.

3710. Investments. (3). Principles of investment in stocks and bonds. Includes fundamental, economic, and technical analysis; measurable and unmeasurable aspects of risk; portfolio management; and the psychological aspects of the market. PREREQUISITE: FIR 3410.

3720. Financial Markets. (3). Survey of important funds markets, institutions and characteristics peculiar to them. Sources of supply of and demand for funds in each market, and complex interrelations among several markets analyzed. PREREQUISITE: FIR 3410.

3770. Commodity Futures Market. (3). Mechanics of trading including the contract, commodities traded, and exchanges involved. Transfer of risk and stabilization of prices through futures trading. Role of speculators. Buying/selling strategies including hedging used by farmers, commodity marketers, speculators, and processors. PREREQUISITE: FIR 3710.

3810. Principles of Risk and Insurance. (3). Nature and handling of risk in personal and business situations. Emphasis on property, liability and life exposures to loss. Designed for non-insurance major as well as a basis for advanced study.

4011-6011. Estate Planning and Law of Taxation. (3). Survey of law of taxation as applied to transmission of property by gift or death and its impact upon accumulations of wealth. Estate planning from individual viewpoint designed to create, maintain, and distribute maximum estate possible.

4110-19. Special Topics. (3). Current topics in one of following areas: Finance, Insurance, Real Estate, or Business Law. Topics varied and announced in *Schedule of Classes* (for example, International Business Law). *May be repeated once with change in topic area.* PREREQUISITE: consent of instructor.

4310-6310. Real Estate Law. (3). Law and legal instruments as applied to real estate. To serve needs of property owners and those engaged in real estate business.

4320. Real Estate Finance. (3). Terminology, legislation, principles, and analytical techniques pertaining to financing of real estate. Perspective of lender, residential borrower, and income property borrower. PREREQUISITE: FIR 3410.

4340-6340. Real Estate Appraisal. (3). Basic terminology, principles, procedures, and issues. Topics include the nature of value, principles of value, appraisal process, market approach, cost approach, capitalization of income approach, gross rent multiplier approach, and appraisal reports.

4350. Real Estate Investment Principles. (3). Principles and practices reviewed and evaluated. Topics include investment strategy, ownership forms, tax implications, cash flow analysis, measures of return, risk management, and property selection.

4360. Commercial Land Use. (3). (Same as GEOG 4442). Factors influencing the location pattern of commercial land uses; emphasis on location analysis of commercial real estate.

4440. Managerial Finance. (3). Analytical approaches to firm's financial decisions; including current asset management, capital budgeting, cost of capital, capital structure determination, and dividend policy. PREREQUISITE: FIR 3410.

4550. International Finance. (3). Financing international trade and investments; foreign exchange markets and exchange rates; balance of payments; current developments in international financial cooperation. PREREQUISITE: FIR 3410.

4610-6610. Cases In Managerial Finance. (3). Application of tools and principles introduced in previous courses to develop up-to-date problem solving techniques: Cases approached from standpoint of top level management and utilize both quantitative and qualitative analysis. PREREQUISITE: FIR 4440.

4710. Commercial Banking. (3). Study of bank management and bank regulation. Examination of conditions that lead to bank regulation and conditions that caused deregulation. Exploration of current theories of profitable bank operations. PREREQUISITE: FIR 3410.

4720-6720. Management of Financial Institutions. (3). Exposure to financial policies and decision-making that are peculiar to financial institutions in United States. Management of institutions consistent with adequate standards of liquidity and solvency. PREREQUISITES: FIR 3410, 3720.

4770. Security Analysis and Portfolio Management. (3). Development of techniques for finding actual worth of securities, primarily stocks and bonds. Portfolio management involves selection, timing, diversification, and other aspects of supervising investment funds. PREREQUISITE: FIR 3710.

4810-6810. Property and Liability Insurance I. (3). Forms and functions of fire, marine, automobile, general liability and other types of property and liability insurance. Emphasis on business and industrial applications.

4820-6820. Life and Health Insurance. (3). Functions of life and health insurance. Emphasis on economic security needs, human behavior and the problems related to death and dying. Individual life, health and annuity contracts and social insurance. Concepts in risk selections and regulation.

4840-6840. Multiple Line Insurance Company Operations. (3). Company and industry functions other than contracts, including rating, rate-making, reserves, auditing, underwriting, reinsurance, claims, production engineering, and governmental supervision.

4860-6860. Employee Benefit Programs. (3). Life, health and pension benefit programs from the viewpoint of the benefit planner. Topics include the reasons for providing such programs, alternate methods for providing benefits, and broadly designing specifications for benefits.

4870. Risk Management. (3). Problems of risk manager in small and large firms, methods of handling risk that serve as alternatives to obtaining insurance, and brief survey of insurance as standard for comparisons.

4880-6880. Risk Management Finance. (3). Emphasis on integrating financial theory into practice of risk management for the firm; use of quantitative tools to carry out risk management process by developing spreadsheets to measure expected loss, determine appropriate risk handling method, and analyze risk financing arrangements. PREREQUISITE: FIR 3410.

4910. Problems In Finance, Insurance, or Real Estate. (1-3). Student will carry on approved research projects in the major area under supervision of staff members. PREREQUISITES: senior standing and permission of the department chairman.

4911. Internship in Finance, Insurance, and Real Estate. (1-6). Internship in business organization to gain on-the-job experience in real-life environment. Project to be approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITES: senior standing and minimum GPA of 2.75.

4912. Personal Financial Planning Applications. (3). Computer based applications of practical financial planning problems common to planner. PREREQUISITES: junior standing and minimum of 9 hours in finance courses.

4996. Senior Honors Thesis In Finance, Insurance, and Real Estate. (3). Independent research open only to those students enrolled in the honors program. Thesis supervised by departmental faculty member. PREREQUISITES: senior standing and permission of the Director of the College Honors Program.

MANAGEMENT

ASSOCIATE PROFESSOR
PETER S. DAVIS,
Interim Chair
Room 202, Fogelman Business and Economics Building

Students must have junior standing and have met specific course prerequisites with a grade of C or better to be eligible for all 3000- and 4000-level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of C in each; (2) minimum of 2.25 GPA in all required lower division business courses and MATH 1312, and (3) 55 hours of coursework including MATH 1312 and 9 hours of English (See *B.B.A. Degree Requirements—General Requirements*).

MANAGEMENT (MGMT)

1010. Introduction to Business. (3). Acquaintance with major institutions and practices in business and coverage of elementary concepts of business. Survey of functional areas of business and the activities of management. Provides orientation for selection of major and information on business career opportunities. NOTE: *If taken by students with 25 hours or more, credit will not count for BBA degree.*

3110. Organization and Management. (3). Comprehensive survey of management functions, basic concepts, and management principles. Includes coverage of planning and decision making, organizing, directing, and controlling. Focuses on coordination of organizational resources to achieve objectives.

3215. Management of Human Resources. (3). Personnel functions and basic concepts. Includes human resource planning, job analysis, staffing, development, compensation, employee/labor relations, health and safety, industrial employee union representation, and impact of the Equal Employment Opportunity Act.

3510. Business Communication. (3). Communication theory applied to business and the professions, with emphasis on effective writing. Presentation of written and oral case solutions, including letters, memoranda, reports, and employment applications. Selection and use of research sources. Consideration of business ethics, technology, and intercultural communication. **[W].**

4110-19. Special Topics in Management. (3). Topics varied and announced in *Schedule of Classes.* PREREQUISITE: consent of instructor.

4240. Compensation and Performance Appraisal. (3). Systematic examination of administration of wage and salary as tool of management. Through use of job descriptions, job analysis, and job evaluation methods, instruction in techniques of rationalizing

wage structures. Analyses of some outstanding considerations that must be taken into account in installing and administering wage programs are made. PREREQUISITES: MGMT 3110, 3215.

4251. Labor Relations. (3). Examination of historical, legal, and institutional relationship between labor and management, including negotiating/collective bargaining process, administration of contract, establishment and utilization of grievance procedures, and current issues in labor management relations. PREREQUISITE: MGMT 3110, 3215.

4260. Employee Staffing and Development. (3). Examination of processes related to recruiting, selecting, and developing qualified persons for employment in organizations. Topics include determination of staffing needs, recruitment of a sufficient applicant pool, utilization of selection tools, and offering orientation training programs for employee development. Emphasis on legal context of selection decisions. PREREQUISITES: MGMT 3110, 3215.

4410-6410. Office Management. (3). (ADOS 4410). Modern methods in office organization and management, including office systems and procedures, office layout and design, and ergonomic considerations.

4420. Organizational Behavior in Business. (3). Human relations as applied to people at work in all kinds of organizations. Emphasis on understanding of human behavior and motivation of employees to work together in greater harmony. Topics include fundamentals of organizational behavior, leadership and its development, organizational environment, and communication and group processes. PREREQUISITE: MGMT 3110.

4510. International Business Communication and Negotiation. (3). Importance of business communication in conducting global business effectively. Emphasis on organizational and interpersonal communication and negotiation skills needed in an integrated world economy. Includes culture-based assumptions, contrasting cultural values, communication and negotiation strategies, verbal and nonverbal patterns, culture shock, and country-specific information. PREREQUISITE: MGMT 3510.

4710. Business Policy. (3). Advanced problems in determination, execution, and control of strategic management process in light of changing environments in which organizations operate. PREREQUISITES: MGMT 3110 and senior standing in The Fogelman College of Business and Economics. Enrollment limited to graduating seniors. **[I]**

4810. International Management. (3). Introduction to issues in international business and exploration of environment facing firms in international arena. Problems in planning, implementing, and controlling activities such as choosing foreign associates, selecting plant location, and dealing with labor, structure, legal constraints, and trade problems. PREREQUISITE: MGMT 3110.

4820. Entrepreneurship. (3). Initiation process of new business venture. Participants as teams develop detailed development plan covering all phases of business initiation and development. PREREQUISITE: MGMT 3110.

4910. Management Problems. (1-3). Student carries on approved research projects in his major area under supervision of staff members. PREREQUISITES: senior standing and permission of department chairman.

4911. Internship in Management. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITES: senior standing and a minimum GPA of 2.75.

4996. Senior Honors Thesis in Management. (3). Independent research open only to those students enrolled in the honors program. Thesis supervised by departmental faculty member. PREREQUISITES: senior standing and permission of the Director of the College Honors Program.

MANAGEMENT INFORMATION SYSTEMS AND DECISION SCIENCES

PROFESSOR
MARK GILLENSON, *Chair*
Room 300, Fogelman Business and Economics Building
http://www.people.memphis.edu/~misds

Students must have junior standing and have met specific course prerequisites with a grade of C or better to be eligible for all 3000- and 4000-level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of C in each; (2) minimum of 2.25 QPA in all required lower division business courses and MATH 1312, and (3) 55 hours of coursework including MATH 1312 and 9 hours of English (See *B.B.A. Degree Requirements—General Requirements*).

Comparable courses taken previously with a MGMT prefix may not be taken for additional credit with the ISDS prefix.

INFORMATION SYSTEMS AND DECISION SCIENCES (ISDS)

1240. Programming for Business. (3). (ADOS 1240). Programming methodology using BASIC and FORTRAN languages and business applications. Designing and writing a variety of programs for use on CRT terminals, minicomputers, and microcomputers. Emphasis on financial, accounting, management, economic, and office areas.

2710. Business Statistics I. (3). Introduction to basic statistical procedures for analysis and interpretation of business data. Topics include collection and presentation of data, probability theory, measures of central tendency and variability, sampling distributions, estimation of parameters, and principles of hypothesis testing. Introduction to a statistical software package. COREQUISITE: MATH 1312.

2711. Business Statistics II. (3). Emphasis on statistical analysis and decision making. Topics include nonparametric models, index numbers, analysis of variance, simple and multiple correlation and regression, and time series analysis. Extensive computer applications are used for decision support. PREREQUISITE: ISDS 2710; MATH 1312.

2749. Introduction to Business Microcomputer Applications. (1). Introduction to use of microcomputers for performing business activities. Use of lab environment with direct instruction uses of current and electronic communication.

2755. Introduction to Management Information Systems. (3). (2750). Introduction to major concepts in business information systems. Emphasis on use of information systems to solve business problems. COREQUISITE: ISDS 2749.

2770. Computer Hardware/Software. (3). Provides experience working with common operating systems including UNIX, DOS/Windows, and Mainframe. Includes file manipulation, editing functions, communication, and shell programming. PREREQUISITE: ISDS 2749, 2755.

3510. Production and Operations Management I. (3). Operations as a key element of organizational strategy from a competitive viewpoint. Integration of various techniques to facilitate solution to productivity and quality issues in both manufacturing and service industries using multifunctional approaches in the creation of goods and services. PREREQUISITE: ISDS 2711.

3745. Application Program Development I. (3). (3750). Introduction to business application programming. Program development employing random access and sequential file structures.

3755. Application Program Development II. (3). (3730). Basic computer architecture knowledge necessary to master programming in C and to provide fundamental knowledge of control structures, modular form and addressing schemes in the C language. PREREQUISITE: ISDS 3745.

3760. Operations Research. (3). Introduction to decision making, concentrating on problem solving technique. Emphasis on problem definition, model construction, and various solution techniques including linear programming, project analysis and control, queueing methods, and simulation. PREREQUISITES: ISDS 2711, 2749 and 2755, or equivalent.

3770. Systems Analysis Methods. (3). (MGMT 2780). Qverview of systems development life cycle. Emphasis on current systems documentation through use of classical and structured tools and techniques for describing process flows and data flows, data structures, file and input/output design and program specifications, data gathering and information reporting activities, transition from analysis to design. PREREQUISITES: ISDS 2749, 2755.

3775. Business Data Management. (3). (MGMT 4755). Focus on (1) designing, writing, and debugging programs written in a high-level language for common business applications involving direct access files; (2) selecting appropriate file organization; (3) designing data models; and (4) evaluating Commercial Data Base Management Systems. PREREQUISITES: ISDS 2749, 2755.

3780. Application Program Development III. (3). Programming elements including object oriented programming extensions among traditional high level programming language. Editing files, compiling and debugging programs. PREREQUISITE: ISDS 3755.

3790. Network Design and Management. (3). Introduction to business telecommunications concepts and terminology. Topics include decentralization of computer processing, communication links, communications-oriented hardware and software, network design, and network management. PREREQUISITES: ISDS 2749, 2755.

4000-09. Special Topics in Management Information Systems. (3). Selected topics of current interest in management information systems and computer software application. Topics are varied and announced in *Schedule of Classes*.

4110-19. Special Topics in Management Information Systems and Decision Sciences. (3). Topics varied and announced in *Schedule of Classes*. PREREQUISITE: consent of instructor.

4510. Production and Operations Management II. (3). (MGMT 4510). Emphasis on entire production system including interface with engineering, role of materials management, relationship to data base management, and problems of systems coordination. Master planning, value analysis, and organizational aspects of production environment critically examined. PREREQUISITES: MGMT 3110, ISDS 3510.

4511. Materials Management. (3). (MGMT 4511). In-depth course in planning and control of materials requirements. Order point models and systems and requirements planning techniques studied. Aggregate inventory management, distribution, inter-plant inventories, and design of materials management systems emphasized. PREREQUISITES: MGMT 3110, ISDS 3510.

4512. Productivity Management. (3). Total systems perspective toward analyzing productivity issues that affect organizational performance. Importance of correctly defining and measuring productivity and supporting activities to maintain it. PREREQUISITE: ISDS 3510 or consent of instructor.

4760. Business Computing Environments. (3). (4765). Fundamentals of advanced computing environments and user-interface design issues. Concepts include: client-server architectures, graphical user interfaces, visual programming, decision support systems and group support systems. PREREQUISITES: ISDS 2749 and 2755, or permission of instructor.

4770. Structured Systems Analysis and Design. (3). (MGMT 3780). Advanced study of structured systems development. Emphasis on strategies and techniques of structured analysis and structured design for producing logical methodologies aiding in dealing with complexities in development of information systems. PREREQUISITES: ISDS 3770, 3775.

4780-6780. Applied Software Development Project. (3). (MGMT 4780). Application of programming and systems development concepts, principles and practices to a comprehensive system development project. Team approach used to analyze, design and document realistic systems of moderate complexity. Use of project control techniques, formal presentations and group dynamics in development of information system. Development of database to support system. PREREQUISITES: ISDS 3770, 3775.

4790-6790. Management Information Systems. (3). Problems and techniques concerning design and installation of responsive systems brought together; special attention to executive use of system's product. System approaches utilizing current planning and control models studied through current literature and texts in computer field. PREREQUISITES: ISDS 2749, 2755 and one college level mathematics course; junior standing, or permission of instructor.

4795. End User Support: Managerial Concepts and Applications. (3). Theory, methodology, and application tools necessary to management of end user computing environment; emphasis on management aspects of the unique environment; advanced techniques of pertinent application tools commonly found in end user environment as crucial to management of end user computing. PREREQUISITE: ISDS 3775.

4800. Information Resource Management. (3). (4785). Broad overview of information systems management function with particular attention to planning, organizing and controlling user services and to managing computer information systems development process. PREREQUISITES: ISDS 3770, 3775 and 3790.

4910. Management Information Systems and Decision Sciences Problems. (1-3). Approved research projects in student's major area under supervision of staff members. PREREQUISITES: senior standing and permission of department chair.

4911. Internship in Management Information Systems and Decision Sciences. (1-6). Internship in business organization to gain on-the-job experience. Project approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITES: senior standing and a minimum GPA of 2.75.

4996. Senior Honors Thesis in Management Information Systems. (3). Independent research open only to those students enrolled in the honors program. Thesis supervised by departmental faculty member. PREREQUISITES: senior standing and permission of the Director of the College Honors Program.

MARKETING

PROFESSOR

DAN L. SHERRELL, *Chair*

Students must have junior standing and have met specific course prerequisites with a grade of C or better to be eligible for all 3000- and 4000-level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of C in each; (2) minimum of 2.25 GPA in all required lower division business courses and MATH 1312, and (3) 55 hours of coursework including MATH 1312 and 9 hours of English (See *B.B.A. Degree Requirements—General Requirements*).

All course prerequisites listed below must be completed with grade of C or better. Any exception to prerequisites requires written permission of department chair.

NOTE: Non-business majors who have completed MKTG 3011 prior to the 1993 catalog may substitute MKTG 3011 for MKTG 3010 as the prerequisite.

MARKETING (MKTG)

3010. Principles of Marketing (3). Comprehensive study of structure and functions of marketing system in the firm, economy, and society. Includes analysis of target markets, environments, and managerial aspects of marketing practices.

3012. Consumer Behavior. (3). Why consumers behave as they do. Psychological and sociological theories and principles applied to current marketing problems. PREREQUISITE: MKTG 3010.

3140. Advertising and Sales Promotion. (3). Introduction to field of advertising including agencies, media, layout, copy, typography; emphasis on various media associated with sales promotion and on need to coordinate entire promotional mix. PREREQUISITE: MKTG 3010.

3170. Promotion Management. (3). Case study of advertising functions, emphasizing determination of advertising strategy; planning of creative strategy; planning of media strategy; evaluation of advertising results and introduction to organization and management of advertising function. PREREQUISITE: MKTG 3140.

3320. Retailing Fundamentals. (3). Changing concepts of retailing from management viewpoint. Principles that underlie successful operation of enterprises distributing products and services to ultimate consumers. PREREQUISITES: MKTG 3010.

3410. Sales Fundamentals. (3). Basics of personal selling: preparation, personality development, communications, sales interview techniques, ethics, and career opportunities. Selling skills developed via sales presentations, role playing, audio-visual self-observation, and use of sales aids. PREREQUISITE: MKTG 3010.

3610. Distribution Concepts. (3). Distribution system within an organization. Emphasis on transportation, customer service, inventory, warehousing and packaging functions. PREREQUISITE: MKTG 3010.

3620. Logistics Management. (3). Economic, social and political aspects of transportation system of the United States. Interrelationships among transportation, physical distribution, logistics, marketing, production, and financial management as they affect flow of raw materials and finished goods through the firm. PREREQUISITE: MKTG 3610.

3630. Transportation Management. (3). Detailed analysis of freight traffic function within firm's logistics system. Includes rate and classification systems, claim liability, shipping document procedures, carrier selection, and other aspects associated with organizing and operating traffic department. PREREQUISITE: MKTG 3610.

4080. Marketing Research. (3). Research methods and procedures used in field of marketing to help solve business problems. PREREQUISITES: ISDS 2711, 2749, 2755, and MKTG 3010.

4220. Purchasing. (3). Policies for effective and efficient procurement of goods and services for today's industry. Close attention to measurement and evaluation of purchasing performance. PREREQUISITE: MKTG 3010.

4230. Services Marketing. (3). Broadens and applies marketing concepts and techniques in services industries and compares to tangible goods marketing—all within the framework of total quality management.

4240. Direct Marketing. (3). Topics dealing with implementation of a direct marketing program, including telemarketing, cataloging, direct mail, electronic media, and direct response advertising, and how it fits into overall marketing strategies. PREREQUISITE: MKTG 3010.

4410. Sales Management. (3). Sales management functions of recruiting and hiring, training and assimilating, planning, controlling and motivating, and sales analysis. Role of personal selling in promotional mix and sales objectives of management. PREREQUISITE: MKTG 3010.

4470. Negotiation Skills. (3). Emphasis on fundamental skills in negotiation across a variety of settings, including business, law, health care, and public administration. Basics of both collaborative and competitive approaches, including planning tools and techniques; will address international focus.

4490. Sales Technology Applications. (3). In-depth course in various technologies and systems used in sales planning and control. Computer-based applications in sales call planning, territory and time management, prospect planning, and account management. Emphasis on use of interactive video technologies in training and account management. PREREQUISITE: MKTG 3410.

4530. International Marketing. (3). Bases and promotion of foreign trade; international marketing organizations and methods; technical and financial features of international marketing. PREREQUISITE: MKTG 3010.

4570. Import/Export Marketing. (3). In-depth course in international data sources, market analysis, and export mechanics. Emphasis on current international business practices and market conditions. PREREQUISITE: MKTG 3010.

4620. Carrier Management. (3). Problems confronting managers of transportation companies. Includes carrier organization, operations, marketing strategies, finance, control, sales, labor relations, and shipper-carrier interaction. PREREQUISITE: MKTG 3610.

4790. Ethics in Marketing. (3). Survey of concepts, issues, and decisions fundamental to ethical decision making in marketing. Issues and decisions related to strategy planning and implementation in marketing organizations.

4901. Management of Marketing Strategies. (3). Comprehensive study of marketing strategies and how implemented. Computer games and cases as well as "real-world" problems to illustrate application of marketing concepts in practical manner. PREREQUISITES: MKTG 4080. Student must take in senior year.

4910. Problems in Marketing. (1-3). Students carry on approved research projects in their major area under supervision of staff member. PREREQUISITES: senior standing and permission of department chair.

4911. Marketing Internship. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved by department chair and supervised by departmental faculty member. Credit allowed only after acceptance of student's written report by department chair and supervising faculty member. PREREQUISITES: senior standing and minimum GPA of 2.75.

4920-29. Special Topics in Marketing. (3). Topics are varied and announced in *Schedule of Classes. May be repeated once with change in topic.* PREREQUISITE: consent of department chair.

4996. Senior Honors Thesis in Marketing. (3). Independent research open only to those students enrolled in the honors program. Thesis supervised by departmental faculty member. PREREQUISITES: senior standing and permission of the Director of the College Honors Program.

The College of Communication and Fine Arts

RICHARD R. RANTA, B.S., M.A., Ph.D., *Dean*
Room 232, Communication Fine Arts Building

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
Art	Art	(1) Art Education (2) Ceramics, Painting, Sculpture, Printmaking (3) Graphic Design (4) Interior Design (5) Photography	Bachelor of Fine Arts (B.F.A.)
	Art History		Bachelor of Arts (B.A.)
Communication	Communication	(1) Broadcast and Electronic Media (2) Communication (3) Film and Video Production	Bachelor of Arts (B.A.)
Journalism	Journalism	(1) Advertising (2) Broadcast News (3) News Editorial (4) Public Relations	Bachelor of Arts (B.A.)
Music	Music	(1) Performance (2) Sacred Music (3) Composition (4) Music History (5) School Music (Instrumental) (Choral)	Bachelor of Music (B.M.)
	Commercial Music	(1) Music Business (2) Recording Technology (3) Jazz and Studio Performance (4) Jazz and Studio Composition/ Arranging	Bachelor of Music (B.M.)
Theatre and Dance	Theatre	(1) Performance (2) Design and Technical Production (3) Dance	Bachelor of Fine Arts (B.F.A.)

Individual program requirements described in the *Undergraduate Issue of the 1997-1999 Bulletin of The University of Memphis* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this bulletin; or consult the undergraduate bulletin website at: http://www.memphis.edu for the latest catalog updates.

PHILOSOPHY

The College of Communication and Fine Arts is focused ultimately upon visual and audible symbols, whose rational and emotional values it is the mission of the college to create and explore. In the belief that perception is largely shaped by experience, The College of Communication and Fine Arts offers a range of symbolically rendered experiences, both individual and collective, in the hope of broadening and sensitizing the perceptions of its students.

The kind of symbolic experience that communicates emerges when, in Ruskin's phrase, "the hand, the head and the heart of man go together." Students in The College of Communication and Fine Arts receive individual and small group instruction toward this end. In the hope of furthering the capacity to impose a pattern on experience and to recognize the patterns offered by others, students of the college are exposed additionally to courses drawn from a broad base of the liberal arts.

The faculty of the college represents a diversity of academic and artistic backgrounds and interests, reflected not only in its teaching, but also in research and creative activities. It is a faculty united in the attempt to maintain the highest standards in both classroom and studio work, standards that find their limits at last only in the mystery and wonder of the human experience from which they rise.

PURPOSES

The College of Communication and Fine Arts has four primary functions. First, it offers courses of study aimed at preparing its students to work toward careers in the fine or applied arts, communications, or the performing arts, whether as practitioners, teachers, artists, or consultants. Second, the college affords broad exposure and instruction in fine arts and communication to students of other colleges in the university whose degree programs may be enhanced by such exposure. Third, with a view toward individual professional growth as well as general cultural enhancement, the college vigorously promotes both scholarly research and artistic production on the part of its faculty. Finally, the college seeks to enrich the cultural atmosphere of both the university and the community at large through a continuing variety of public programs, to include art exhibitions, media presentations, dramatic productions, concerts, recitals, lectures, seminars, debates, workshops, festivals, and the like.

Through the diversity of these constituent elements, the college reflects the unity and challenge facing the communicative artist and scholar. Ultimately it is our goal to foster a more intense and profound awareness of the broad range of human experience from which the college derives its pertinence and vitality.

ORGANIZATION

The College of Communication and Fine Arts comprises five academic departments: Art, Communication, Journalism, Music, and Theatre and Dance. The requirements for the majors and miners offered by these departments are listed later in this section.

RESIDENCE REQUIREMENTS

University residence requirements are explained in detail in the *Graduation from the University* section. A transfer student in The College of Communication and Fine Arts must earn at least 6 semester hours in residence in the major subject and at least 3 semester hours in the minor. These credits may be earned only through regular class enrollment for a letter grade.

TEACHER PREPARATION

Students enrolled in a degree program of The College of Communication and Fine Arts who wish to prepare themselves for teaching careers in the secondary schools of Tennessee may meet the state licensure requirements while pursuing their chosen majors.

Admission to the Teacher Licensure Program

Students who plan to pursue an undergraduate program of studies which leads to K-12 Teacher Licensure must submit a formal application to the College of Education Teacher Education Program (TEP).

Students are encouraged to apply for admission to TEP as they enter the college. LEAD 2010, Teaching In Multicultural Settings, is designed to be the first professional course taken by students seeking licensure. Admission proceedings will be discussed in this course within the context of responsibility for one's own professional development, and the developmental nature of teaching knowledge, skills, and dispositions.

Prerequisites for Formal Admission to the TEP are as follows:

1. Admission application completed and returned.
2. Grade of C or above in all ENGL 1101, 1102, COMM 2381, EDPR 2111, LEAD 2010, all courses in the major, and all professional education courses.
3. Satisfactory scores on the Pre-Professional Skills Test (PPST) according to the criteria established by the Tennessee State Board of Education and the College of Education, and the University of Memphis.
4. Minimum of 25 semester hours completed.
5. Oveall GPA of no less than 2.5.
6. Submission of a professional portfolio prior to satisfactory completion of a personal interview.

Conditional TEP Admission.

1. Students who do not meet the admissions critera will be allowed to obtain Conditional Admission only if their deficiencies can be remediated within one semester. Conditional Admission status can be secured for one semester only.
2. Conditionally approved students will be allowed to enroll in professional education courses during the next enrollment period. If at the end of the semester, they are not able to meet the criteria for admission they will be disapproved.

DEGREE REQUIREMENTS

Degrees Offered

A student may earn a Bachelor of Fine Arts, Bachelor of Music, or Bachelor of Arts degree, by majoring in one of the five departments that constitute The College of Communication and Fine Arts. The following is an outline by department of all majors and concentration areas offered by the departments in the College of Communication and Fine Arts.

A minimum grade of C is required in every course applicable toward a major or minor.

Every student should be aware that the mere completion of courses outlined below with a grade of C or better does not guarantee classification as a major or minor in the discipline concerned; *the student must be recommended by the chair of the department in which the major or minor is sought.* If, in the opinion of the chair, the quality of the student's work is not high enough, additional work, the repetition of courses, or other evidences of superior scholarship may be required.

Credit in the College of Communication and Fine Arts may be granted for validated learning from experience or nontraditional instruction. Guidelines for this procedure may be obtained in the office of the Dean of the College of Communication and Fine Arts.

The college requires a one semester physical activity course. A student may elect to take the course on a credit/no credit basis. Only students in the following programs may apply more than 8 semester hours of physical activity courses toward the specified minimum degree requirement: B.F.A. Theatre major with a concentration in Performance or Dance, or a Theatre or Dance minor. In addition to PHED 1000 level courses, MUAP 2002, DANC 1821, 1825, 1827, 2821, 2825, 2827; or THEA 2501 may be selected to fulfill the physical activity requirement.

BACHELOR OF FINE ARTS (IN ART)

The Bachelor of Fine Arts in Art is a professional degree. The requirements provide the student a greater opportunity for specialization in art than the other baccalaureate programs.

The specific degree requirements are divided into five groups: (1) general education, (2) basic art courses, (3) courses in one of the five concentration areas, (4) elective courses in art and (5) elective courses other than art to bring the total to 139 semester hours.

Advanced Placement Credit: A score of three (3), four (4) or five (5) points on the Advanced Placement General Portfolio or the Drawing Portfolio will entitle students to have their portfolios reviewed for the possible award of up to three credit hours. If a student submits art for two separate Advanced Placement portfolios (junior and senior years), a maximum of six credit hours may be awarded. For a grade of three (3) points in the Drawing Portfolio or three (3), four (4) or five (5) points in the General Portfolio, three hours of unassigned studio elective credit may be awarded. For a grade of four (4) or five (5) points in the Drawing Portfolio, three hours of basic art credit in ART 1311 (Beginning Drawing) will be considered. To determine how Advanced Placement credit will be awarded, all Advanced Placement portfolios must be reviewed within the department for consistency with standards appropriate to the performance level and range of enrolled students.

New Department Advising: (1) First semester Freshmen are advised by the Academic Counseling Unit. Students without pre-college level requirements may request an Art Advisor during the first semester. ACU advises until a major is declared and until high school deficiencies are removed. (2) A General Art Advisor is assigned until a concentration interest is selected (see Concentrations.) (3) An Art Advisor is assigned only when an Art major is declared. The process of changing to a major in Art begins in ACU. (4) A Program Advisor is assigned when the concentration interest is declared. The Program Advisor advises students through the concentration admission process (see Candidacy Review), and remains as advisor until graduation. (5) The College of Communication and Fine Arts Graduation Analyst must be consulted at least twice: first, after accruing 100 hours; again during the semester prior to the semester of graduation. Permission of the Dean must be obtained before taking courses from another institution intended to apply toward The U of M graduation. (6) Transfer students with fewer than 40 hours are to see the Art Office for advising; transfer students with 40 hours or more must confer with the Graduation Analyst before seeking an Art Advisor. (7) The Art Department strongly recommends regular consultation with the assigned advisor. *Assistance from the advisor, however does not relieve students of the responsibility of studying the appropriate catalog and fulfilling all degree requirements.*

Admission and Retention: A Candidacy Review is required of all students intending to major in art. Admission to The University of Memphis and completion of basic art courses do not guarantee placement in Department of Art concentration areas. Admission is selective and is based on a portfolio evaluation reflecting professional standards and expectations of the particular concentration. Space availability may also affect admission decisions. Concentration admission applications are to be made upon the completion of the basic art courses — ART 1210, 1215, 1311, 1314, 2101, 2102, — and any additional courses (listed below) required for a specific concentration. A portfolio that includes but is not limited to works from these courses is required as part of the application. Guidelines and application forms for admission to a concentration are available from the Department of Art office and from faculty advisors. Transfer students at the sophomore level or higher must meet concentration requirements. Required courses may be satisfied either through transfer credit or by courses taken at The University of Memphis. Upon completion of the Candidacy Review, the student is notified of one of the following: 1) accep-

tance to the concentration; 2) one semester acceptance on a probationary status; 3) recommendation to pursue studies in another area of art; 4) recommendation to correct deficiencies and reapply; or 5) denial of concentration admission.

Concentration Entrance Requirements: Art Education; or Ceramics, Painting, Printmaking, and Sculpture; or Photography: ART 2313, 2314, (Photography applicants take 2702 instead of 2314; Art Education applicants take 3411 instead of 2314), plus two or more from: 2331, 2351, 2511, 2523, or 2701. Portfolios are to be presented for review in the second semester of the sophomore year or during the semester when the student completes these requirements. Permission to enroll in 3000 or 4000 level studio courses, except for Art 3411 and 3701, depends upon acceptance into a concentration.

Graphic Design: ART 2213, 2221, and 2313. Students are to apply for portfolio review during the semester they complete the basic art courses and these three courses. Permission to enroll in any 3000 or 4000 level graphic design course is based upon the review.

Interior Design: ART 2233 and 2234. Students are to include work from the basic art courses plus these two courses. Portfolios are reviewed when the applicant completes these courses. Permission to enroll in any 3000 or 4000 level interior design course is based upon this review.

Graduation: For the B.F.A. degree, a total of 139 semester hours is required for graduation, 90 of which must be in professional course work. A minimum of 42 upper division semester hours is required for this degree. A minimum grade of C is required in all art courses.

1. General Education Courses

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312,1321 (4), 2000.

Literary Heritage (3 hours): ENGL 2201 or ENGL 2202.

Fine Arts Heritage: Not required for students who meet all B.F.A. in Art requirements for graduation.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405; SOCI 3422.

Social Science (6 hours): One course from list A and one course from list A or B:

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/CSED 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (8 hours—Sequence required): BIOL 1071, 1072, 1081, 1082; BIOL 1151, 1152, 1161, 1162; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1001, 1011, 1002, 1022; GEOL 1101, 1103; PHYS 1001, 1010, 1002, 1020; PHYS 2003, 2510, 2004, 2520, or UNIV 1610, 1611.

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100,1104, 2204, 2206, 3000. Students completing NAVY 1100,1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (3 semester hours): COMP 1200, a course of study approved by the dean, or passing an approved computer literacy examination.

2. Basic Art Courses *(18 hours)*

ART 1210, 1215, 1311, 1314, 2101, 2102.

3. Art History *(12 hours)*

Upper division semester hours in art history courses; no more than 3 hours of museum studies may be used to satisfy this requirement. Interior Design students must take ART 3103, 3104; Graphic Design students must take ART 4224; Photography students must take ART 4721 and 4156. Ceramics, Painting, Printmaking, Sculpture students and Art Education students must take ART 4156. Art Education students take a total of 9 upper division hours.

4. Concentration Areas:

a. **Ceramics, Painting, Printmaking, and Sculpture** *(57 hours):*

ART 2313, 2314, 2331, 2351, 2511, 2523, 2701, 2301 and 4610 plus ten (10) additional courses:

Ceramics: ART 3524, 4521, 4522

Painting: ART 3332, 4321, 4322, 4331, 4332

Printmaking: ART 2352, 3351, 3352, 4351, 4352

Sculpture: ART 3511, 3512, 4511, 4512

ART 4611, 4621, 4622

All required 2000 level art courses must be completed before enrollment in 4000 level studio classes.

b. **Graphic Design** *(51 hours):*

ART 2213, 2221, 2222, 2351, 2701, 4211, 3213, 3221, 3222, 3227, 4221, 4222, 4223, 4230, 4232 or 4233, 4235, 4341, and one of the following: ART 3312, 3225, 4223, 4232 or 4233.

c. **Interior Design** *(48 hours):*

ART 1233, 2233, 2234, 2238, 3233, 3234, 3235, 3236, 3237, 3238, 3312, 4237, 4238, 4239, 4240, 4251.

d. **Art Education** *(54 hours):*

ART 2301, 2313, 2351, 2414 (1 hr), 2511, 2523, 3411, 3416 (1 hr), 3423, 4321, 4418 (1 hr), 4427; EDPR 2111, LEAD 2010, SPED 2000; ICL 3000, 4800, 4912 (9 hrs). A studio specialty of three or four courses in the same field is also required; see advisor for details. All required 2000 level art courses must be completed before enrollment in 4000 level studio classes.

e. **Photography** *(54 hours)*

ART 2301, 2313, 2331, 2351, 2511, 2523, 2701, 2702, 3701, 4610, 4701, 4702, 4703, 4704, 4711 (6 hours), 4712 (6 hours). All required 2000 level art courses must be completed before enrollment in 4000 level studio classes.

5. Art Electives to complete the total of 90 semester hours.

6. Elective Courses other than art to complete the total of 139 semester hours. These courses will be chosen by students in consultation with their advisors and the chair of the Department of Art.

MINORS

Art Minor: 24 semester hours in art courses, 9 of which must be from the upper division. Courses selected for the minor are to be approved by the advisor who will be assigned by the department chair.

Photography Minor: 18 semester hours as follows: ART 2701, 2702, 3701, 4701, 4702, and 4721.

BACHELOR OF FINE ARTS (IN THEATRE)

The Bachelor of Fine Arts degree is a program specifically designed for students whose certain interests and abilities strongly suggest the potential for pursuing careers as artists in the resident, professional, community, or academic theatre. To expand the student's creative powers and deepen the commitment to a vocation in the theatre, the B.F.A. program offers the student (1) a basic probing of all the arts and crafts of the theatre; (2) an exploration in depth of one area of special interest; (3) the opportunity to participate creatively as a theatre artist through extensive production experience. Three areas of specialization are offered: I. Performance, II. Design and Technical Production, and III. Dance. Students entering the B.F.A. program will elect one of these three areas for concentrated study. The student normally will begin specialized training and the audition/portfolio review process not later than the sophomore year.

Admission and Retention Criteria: Admission to the B.F.A. program is by application. To remain in good standing as a major, the student must be evaluated through the audition/interview or portfolio review/interview process. Following their audition/interview or portfolio review/interview, applicants will be notified as to whether they have been accepted into the program, accepted for one more semester on a probationary basis, or advised to pursue another degree.

(1) Performance: Retention in the Performance concentration is based on a required audition and interview, twice yearly. In addition to the interview, the student is expected to present an audition consisting of a song, a group dance audition, and presentation of two monologues from plays of distinctly different styles and/or periods. The total time of the monologues may not exceed five minutes.

(2) Design and Technical Production: Retention in the Design and Technical Production concentration is based on a required portfolio review and interview, once a year. In addition to the interview, the student is expected to present a portfolio of artistic and production work. This may consist of items including photographs, sketches, costume plates, elevations, lighting plots, and ground plans.

(3) Dance: Retention in the Dance concentration is based on a required audition and interview, twice yearly. In addition to the interview, the student is expected to participate in a group audition and to choreograph and perform a two to three minute dance solo.

NOTE: The fact must be emphasized that admission to the B.F.A. curriculum does not imply a student's permanent tenure in the program. Beyond the audition interview or portfolio review, the student's active participation in the co-curricular activities of the department will be assessed by the theatre and dance faculty. Artistic growth, development of technical facility, and continuing commitment to creative excellence on the part of the student will be evaluated. Permission to continue in the program will be based on this evaluation.

Transfer of Credit: In certain cases students may be admitted to an advanced level of the B.F.A. program. Such admission will be based upon: (1) an audition and interview; (2) the student's previous course work in theatre, particularly in the area of special interest; (3) the student's previous involvements in production experience, (4) letters of recommendation from former Theatre Arts instructors and/or directors. Even if admitted to an advanced standing, the student will be required to remedy previous course deficiencies.

Advising: Upon application to the B.F.A. program, each student will be assigned a faculty advisor. For this degree, 136 semester hours are required for graduation. A minimum grade of C is required in all theatre and dance courses applicable to the major. The student must maintain an overall grade point average of 2.0.

1. General Education Courses

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312, 1321 (4), 2000.

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage (3 hours): THEA 1551 or DANC 1151.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301 PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (6 hours): Select one course from list A and one course from list A or B:

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/CSED 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (8 hours—Sequence required): BIOL 1071, 1072, 1081, 1082; BIOL 1151, 1152, 1161, 1162; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1001, 1011, 1002, 1022; GEOL 1101, 1103; PHYS 1001, 1010, 1002, 1020; PHYS 2003, 2510, 2004, 2520; or UNIV 1610, 1611.

Fitness and Wellness (5 hours): HMSE 1100 plus THEA 2501.

Computation Intensive (3 hours): THEA 4591 or any upper division course designated as computation intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): THEA 3411, 4571, 4582 or any upper division course designated as writing intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): THEA 4582 or any upper division course designated as integrative and approved by advisor. PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: COMP 1200, a course of study approved by the dean, or passing an approved computer literacy examination.

2. Theatre and Dance Core Courses

(23-26 hours):

THEA 1561, 2511, 2531 (4), 3412, 4 of 3601-3608 (4), *4541 (1-6), 4591.

3. Concentration Areas

Performance, Design and Technical Production, and Dance. Individual concentration course sequence to be determined in conference with student's advisor. Emphasis in specific areas will determine sequence structure. The combination of hours for General Education courses, Basic Theatre core courses, Electives and the individual concentration sequence will total 136 hours. FOR EXAMPLE:

a. Performance

THEA 1411, 2532 (4), 3212 (4), 3213, 3505, 3506, 3531 (4), 3532 (4), 3551 (1), 1 of 3601-3608 (1), 4455, 4457, 4521, 4551, 4552, 4582; elective courses chosen in conference with the student's advisor.

b. Design and Technical Production

THEA 1411, 2512, 3511, 3561, 3562, 2 of 3601-3608 (2), 4514, 4551, 4552, 4555, 4556, 4557, 4561, 4562, 4563, 4582, 4595, 4596; elective courses chosen in conference with the student's advisor.

c. Dance

DANC 2101, 2821 (4), 2825 (4), 3101, 3201, 3829 (12), 4101 (6), 4201, 4202, 4301 (3), 4582, Choose 6 hrs. from among THEA 3505, 3506, 4501; Music (3) to be selected with adviser; elective courses chosen in conference with the student's advisor.

***NOTE:** THEA 4541 Internship (see course description section.): The intent of this requirement and course is to provide the student experience in a full-time theatre production situation or, in the case of dance students, an intensive professional workshop. Off-campus participation (usually following the junior year) is an essential element of the B.F.A. degree program. Details are to be planned in advance in conference with the student's advisor.

The Minor: Any student wishing to minor in any area of the Department of Theatre and Dance should see the department chair who will assign an appropriate advisor. The minor must consist of at least 18 hours of approved coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

HONORS PROGRAM

The Honors Program offers superior students the opportunity to engage in an intensive and individualized course of study leading to a Bachelor of Fine Arts degree with Departmental Honors. The program enables honors students to develop their particular talents, interests, and abilities within a curriculum designed to encourage academic independence and creativity.

Admission: To be eligible for admission to the Honors program, a student must meet the following requirements: (a) the completion of 55 semester hours of college course work (or Junior standing), (b) an overall grade point average of 3.25 or better, (c) a departmental grade point average of 3.25 or better. Students who have not met all of these requirements may apply for admission into the program, and their applications will be considered on a "provisional admittance" basis. Applications may be obtained from the Director of the Honors Program or from the main office of the department. Completed applications should be submitted to the Director of the Honors Program at least two weeks before the end of each semester. Students may be admitted to the program at the end of any semester (including summer semesters).

Requirements: To graduate with departmental honors, an honors student must fulfill the following requirements:

(a) The completion of at least 18 hours of honors work. Twelve of these hours must be in upper division departmental honors work, and a maximum of 6 hours may be in lower division or extra-departmental honor work.

(b) The completion of an honors project or thesis in the senior year.

(c) The maintenance of an overall grade point average of 3.0 and a departmental grade point average of 3.25.

An honors student may earn departmental undergraduate honors credit in three ways: (1) by taking THEA 4980, "Honors Studies" (for a maximum of 15 hours credit); (2) by taking THEA 4999, "Senior Honors Thesis" (for a maximum of six hours); and (3) by taking THEA 4982, "Honors Seminar" (for a maximum of 9 hours) for a combined total of no more than 18 hours. This will allow honors students to enroll in those departmental seminars that most specifically reflect their particular interests in theatre. An honors student majoring in any field of concentration in the department will be able to substitute honors credit for certain track requirements for graduation. Contracting for honors credit in other courses or enrolling in Independent Study or Special Problems courses will not fulfill Honors Program requirements.

After completing 6 hours of Honors Studies, honors students may begin work on their projects or theses. These projects will be under the direct supervision of the Director of the Honors Program although students may ask any member of the departmental faculty to sit on their committees (three faculty members will sit on each student's committee). Typically, an honors student earns 6 hours of credit for the project, 3 of which reflect a semester of research or preparation, while the final 3 hours reflect a semester of writing or assembling the project. The honors project does not have to be a thesis; the nature of the project will depend on the student's interests, talents, and course work and will be decided on an individual basis by the Director of the Honors Program.

For further information about the Honors Program, contact the chair, Department of Theatre and Dance.

BACHELOR OF MUSIC (IN COMMERCIAL MUSIC)

The Bachelor of Music degree in Commercial Music is designed for students whose interests and abilities indicate a strong potential for significant achievement in the commercial music industry. Four concentrations are available: Music Business; Recording Technology; Jazz and Studio Composition/Arranging; and Jazz and Studio Performance.

Admission: Admission is based on selective procedures, and admission to the

university does not guarantee placement in the Commercial Music Program. Stringent quality control is essential; therefore, an assessment is required of all students desiring to enter the program. Entrance requirements vary by concentration. Specific admissions criteria may be obtained through the office of the Chairman, Department of Music. Through the admissions procedure, preliminary estimates of student commitment and potential success can be made. Upon admission, the student will be assigned a CMUS advisor.

Retention: The student's progress and continued potential will be reviewed twice yearly by the appropriate Commercial Music faculty. Permission to continue in the program will be based upon this evaluation. Retention criteria may be obtained through the office of the Chairman, Department of Music.

Piano Proficiency: Students in Music Business or Recording Technology have no piano proficiency requirement. All students concentrating in Jazz and Studio Composition/Arranging or Jazz and Studio Performance, with the exception of keyboard majors, must pass the Commercial Music piano proficiency examination before their last semester in the program.

Ensembles: Students in Music Business or Recording Technology have no ensemble requirement. Students in Jazz and Studio Composition/Arranging must accumulate 6 hours credit in the appropriate level jazz or studio ensemble(s) before graduation. Students in Jazz and Studio Performance must accumulate 14 hours credit in the appropriate level jazz or studio ensemble(s) before graduation. Ensemble assignments must be made in consultation with the student's advisor.

Experiential Learning: Credit may be awarded for validated learning from experience or non-traditional instruction. Students who wish to apply for credit for experiential learning may obtain guidelines for this procedure from the Dean of the College of Communication and Fine Arts. (See *Fees and Charges,* for related fee information.)

Graduation from the Program: For students in the Music Business and Recording Technology concentrations, a minimum of 139 hours is required for graduation; a minimum grade of C and a grade point average of 2.5 are required in all courses in the concentration. For students in the Jazz and Studio Composition/Arranging or Jazz and Studio Performance concentrations, a minimum of 139 hours is required for graduation; a minimum grade of C and a grade point average of 3.0 are required in all courses in the concentration.

1. General Education Courses
(40-42 hours)

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312,1321 (4), 2000. NOTE: *Students in Music Business and Recording Technology MUST take MATH 1312 (See prerequisite).*

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage: Not required for students who meet all B.M. requirements for graduation.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (3 hours): ANTH 1100, ANTH 1200, CJUS 1100, CJUS 2110, ECON 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 2301, POLS 2501, PSYC 1101, PSYC 2201, SOCI 1111, SOCI 2100, SOCI 2101/CSED 2101, UNIV 2304.

Natural Science (8 hours—Sequence required): BIOL 1071, 1072, 1081, 1082; BIOL 1151, 1152, 1161, 1162; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1001, 1011, 1002, 1022; GEOL 1101,1103; PHYS 1001, 1010, 1002, 1020; PHYS 2003, 2510, 2004, 2520; or UNIV 1610, 1611. NOTE: *PHYS 2003/2510 and 2004/2520 preferred for students in Music Business and Recording Technology.*

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. NOTE: *Music Business majors are required to take THEA 4591, which satisfies this requirement. For Recording Technology majors, THEA 4591 is preferred.* PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. NOTE: *Music Business majors are required to take ENGL 3601 or MGMT 3510, either of which will satisfy this requirement. Recording Technology majors are required to take ENGL 3601 which satisfies this requirement.* PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. NOTE: *Music Business and Recording Technology majors are required to take CMUS 4898 which satisfies this requirement.* PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: COMP 1200, a course of study approved by the dean, or by passing an approved computer literacy examination. NOTE: *Music Business and Recording Technology majors are required to take JOUR 3900 and JOUR 4900, either of which will satisfy this requirement.*

2. Commercial Music Core Courses
(21 hours)

MUTC 1008 (3), 1009 (3),1010 (1), 1011 (1); MUHL 3301 or 3302 (3); MUSE 1105 (2); CMUS 1116 (2), 2101 (3), 4602 (3).

3. Concentration Areas

a. Jazz and Studio Performance (78 hours)
MUTC 2008 (3) and 2010 (1), 3008 (3), 3009 (1); CMUS 2102 (3), CMUS 3802 (4), 3828 (2); MUAP 1000 (4); MUHL 4806 (3); one of the following:
CMUS 3100 (3), 3101 (3), or 4603 (3); CMUS 4895 (3) (30)
Individual lessons on a major instrument or in voice, of which a minimum of 4 hours must be in upper division courses (16)
Instruction on a secondary instrument or in voice (piano majors take MUTC 2511) (2)
MUAP 3012 and/or 3013 (8)
MUAP 3014 and/or 3015 (4) (4)
MUAP 3103 (6)
CMUS 3825 (3)
CMUS 3826 (3)
CMUS 3827 (3)
CMUS 4103 (3)
These courses have separate sections for voice and instrumental students.

b. Jazz and Studio Composition/Arranging (78-81 hours)
MUTC 2008 (3), 2010 (1), 3008 (3), 3009 (1); CMUS 2102 (2), CMUS 3802 (4), 3828 (2); MUAP 1000 (4); MUHL 4806 (3); one of the following (3-4): CMUS 3100 (3), 3101 (3), or 4603 (3); CMUS 4896 (4) (30)
Major instrument or voice (7)
MUSE 1101 (2), 1104 (2), 1116 (2); MUAP 1312 (2) (pianists take MUSE 1111); MUAP 1411 or 1412 (2) (percussionists take MUSE 1111); MUTC 2501 (2), 2511 (2), 4206 (2); two semesters each of: MUAP 3012 and/or 3103; 3014, and/or 3015; 3103 (vocalists may take MUAP 3601); CMUS 2501 (2), 2502 (2), 3501 (2), 4102 (3), 4501 (3), 4502 (3) (38-39)
Two of the following: CMUS 3801, 3825, 4103; MUTC 4207 (5-6)

c. Music Business (76 hours)
ACCT 2610 (3); CMUS 3100 (3); 3101 (3); 3103 (3); 3802 (3); 4603 (3); 4804 (3); 4898 (3), 4899 (3); choose one set: CMUS 4503/4504 (6) or MGMT 3110/4820 (6); COMM 4811 (3), 4812 (3); ENGL 3601 (3) or MGMT 3510 (3); FIR 3011 (3); JOUR 3900 (3); 4700 (3), 4900 (3); MKTG 3010 (3); MKTG 4470 (3); MUAP 1000 (2); one of the following: MUHL 4801 (3); 4804 (3); 4805 (3); 4806 (3) or 4807 (3); Applied Music Instruction (8); THEA 4591 (3).

d. Recording Technology (73 hours)
CMUS 3103 (3); 3800 (4); 3801 (2); 4603 (3); 4800 (4); 4802 (4); 4803 (4); 4804 (3); 4811 (1); 4898 (3); one of the following: CMUS 3100 (3); 3101 (3), 4503 (3), or 4504 (3); COMM 3823 (4); 3824 (4); 4825 (3); ENGL 3601 (3); FIR 3011 (3); JOUR 3900 (3); 4900 (3); MUAP 1000 (2); one of the following: MUHL 4801 (3), 4804 (3), 4805 (3), 4806 (3) or 4807 (3); Applied Music Instruction (8); TECH 1811 (3).

BACHELOR OF MUSIC (IN MUSIC)

The Bachelor of Music with a major in Music is a professional degree, the requirements for which provide the student with an opportunity for specialization in the traditional disciplines of music and music education. A minimum grade of C is required in every graded course applicable toward the major. The student must maintain an overall grade point average of 2.0. *Exception:* School Music concentration: (1) overall grade point average of 2.25; (2) grade point average no less than 2.25 in all courses taken at The University of Memphis excluding all credit transferred from other institutions; (3) grade point average no less than 2.5 in all music courses; (4) grade point average no less than 2.5 in all required professional education courses; (5) grade of C or above in each professional education and music course. The specific degree requirements are divided into five groups: (1) general education, (2) basic music courses, (3) courses required for the specific emphasis chosen by the student, (4) music

electives and (5) elective courses other than music and music education to bring the total of semester hours taken to 132 (134 for school music concentration). All students must complete a minimum of 42 hours at the upper division level. Transfer students must complete at least 30 semester hours of music and/or music education courses at the upper division level at The University of Memphis.

Admission: All applicants seeking admission as freshman music majors or as transfer students must complete and submit to the Admissions Office of The University of Memphis an appropriate formal application form. In addition to academic considerations, admission to the music degree program requires a personal interview and an audition. The audition consists of (1) performance in the student's major applied area, (2) a music theory examination and (3) a piano placement exam. Candidates are accepted on the basis of accomplishment, potential and suitability for the concentration they wish to pursue. Students seeking admittance as music majors in the fall term should apply no later than *August 1,* and those seeking admittance in the spring term should apply no later than *December 1.* Additional information on specific audition requirements and on interview/audition appointments may be obtained through the office of the Department of Music.

Degree Requirements (figures in parentheses indicate semester hours credit):

1. General Education Courses
(42-45 hours)

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312, 1321 (4), 2000.

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage: Not required for students who meet all B.M. requirements for graduation.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (3 hours): ANTH 1100, ANTH 1200, CJUS 1100, CJUS 2110, ECON 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 2301, POLS 2501, PSYC 1101, PSYC 2201, SOCI 1111, SOCI 2100, SOCI 2101/CSED 2101, UNIV 2304. **NOTE:** *Students in School Music MUST take PSYC 1101 plus one additional 3 hour course from the following list for a total of 6 hours: ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/CSED 2101, UNIV 2304.*

Natural Science (8 hours—Sequence required): BIOL 1071, 1072, 1081, 1082; BIOL 1151, 1152, 1161, 1162; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1001, 1011, 1002, 1022; GEOL 1101,1103; PHYS 1001, 1010, 1002, 1020; PHYS 2003, 2510, 2004, 2520; or UNIV 1610, 1611.

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115. and 4121).

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: COMP 1200, a course of study approved by the dean, or by passing an approved computer literacy examination. *Students in School Music must take ICL 3600 instead of COMP 1200.*

2. Basic Music Courses
(37.5-42 hours)

MUTC 1008, 1010, 1009, 1011, 2008, 2010, 3008, 3009, 3010, 3101, 3102 (MUTC 3101 not required in Composition concentration; MUTC 3102 not required in School Music concentration)	(18-22)
MUHL 3301, 3302, History of Music	(6)
MUSE 3700 Basic Conducting	(2)

Piano Proficiency: All undergraduate music majors must take a piano placement examination before enrolling in applied music courses. This evaluation will place students in the appropriate piano class (MUSE 1105, 1106, 2107, 2108) to develop the skills necessary to pass the Piano Proficiency Examination. All students in the Bachelor of Music (in Music) degree program must pass the Piano Proficiency Examination before the beginning of the senior year. This may be done in either of two ways: (1) by completing MUSE 2108 or (2) by passing without credit the piano proficiency exam given once each semester. Piano proficiency requirements vary according to the area of concentration. A verification will be mailed to the student and to appropriate officials upon completion of the examination. After successful completion of this examination, music students whose major instrument is not piano may audition for major group or private instruction in piano.

Ensembles: All music majors seeking the B.M. in Music, regardless of concentration, must be enrolled in an ensemble of some kind every semester in which they are enrolled in applied lessons. Before graduation, all candidates for this degree must have accumulated a minimum of 8 semesters in an appropriate Large Ensemble (listed below under LARGE ENSEMBLES.) Exceptions to this policy are as follows:

1. Piano performance and guitar performance students must have 6 semesters of large ensemble.
2. Transfer students who, because of transfer, will lack sufficient large ensemble credits must contact the department chair for alternative recommendations or exceptions.
3. Any other request for exception will be reviewed by the department chair, the appropriate ensemble director(s) and the applied teacher.

Ensemble assignments are based on audition and may be repeated but not for the purpose of improving a grade.

Applied Music Workshop: MUAP 1000 is required of all music majors for eight semesters.

3. Major: *Music*

Concentration Areas (choose one):

a. Performance *(45-60 hours)*

Instruction in performance leading to the Bachelor of Music in Music with a concentration in Performance is provided for the following areas: Trumpet, Horn, Trombone, Tuba, and Euphonium (Brass Instruments); Piano, Harpsichord, and Organ (Keyboard Instruments); Percussion; Violin, Viola, Violoncello, Bass, Guitar, and Harp (String Instruments), Flute, Oboe, Clarinet, Saxophone, and Bassoon (Woodwind Instruments); and Voice.

Individual instruction in major performance area	(26)
Instruction in secondary performance area, repertory, and/or pedagogy:	(6)

For Brass Instruments: 2 hours each in individual instruction in two secondary brass instruments; group instruction in woodwind instruments.

For Woodwind Instruments: 2 hours each in individual instruction in two secondary woodwind instruments; group instruction in brass instruments.

For Percussion: group instruction in brass instruments: woodwind instruments, and string instruments.

For String Instruments: 2 hours each in individual instruction in 2 secondary string instruments; 2 hours in appropriate pedagogy or repertory courses.

For Keyboard Instruments, Guitar, and Voice: 6 hours in appropriate courses in repertory, pedagogy, vocal diction, and accompanying.

Music History elective: Choose from MUHL 4001, 4005, 4006, 4007, 4401, 4402, 4403, 4404, 4405, 4406, 4407, 4500, 4804, 4805, 4806, 4807 in consultation with major advisor.	(3)
Music Theory elective: Choose from MUTC 4205, 4206, 4207, 4208, or 4209 in consultation with major advisor.	(2-3)
Junior Recital	(1)
MUAP 4999. Artist Recital	(3)
Small Ensembles	(4-6)

4 semesters of small ensembles, chosen from those listed under "Small Ensembles and Chamber Music" in consultation with the major advisor, is required. 6 hours of MUAP 3301 (Chamber Music for Pianists) is required of students in Piano.

For students in voice, 6 hours in one of the following languages that must be different from admission requirement language: French, German, or Italian; plus MUSE 4211—Vocal Diction I and MUSE 4212—Vocal Diction II. (10)

b. Sacred Music: *(37-44 hours)*

Individual Instruction in Voice or Organ	(14)
MUSA 4104, 4105 Sacred Music in History and Practice I & II	(6)
MUSE 4701 Choral Conducting	(2)
MUSA 4106 Children's Choirs in the Church	(3)
MUAP 4999. Artist Recital	(3)
For students in Voice:	
MUSE 4211 Vocal Diction	(2)
Small Ensembles	(4)
Music Electives	(3)
For students in Organ:	
Individual Instruction in Voice	(4)
MUSA 4107 Service Playing for Organists	(3)
MUHL 4005 History and Literature of the Organ	(3)
Small Ensembles	(2)
Music Electives	(4)

c. Composition: *(53 hours)*

Individual instruction in applied music to include two semesters of piano	(8)
MUTC 2501 Composition	(2)
MUTC 2502 Composition	(4)

MUTC 4501 Composition (at least three semesters) (12)
MUTC 4511 Intermediate Electronic Music (2)
MUTC 4512 Advanced Electronic Music (2)
MUTC 4201 Studies in Music Theory and Composition (9)
002 Sixteenth Century Counterpoint
003 Eighteenth Century Counterpoint
007 Advanced Orchestration
MUTC 4102 Compositional Processes of the 20th Century (3)
MUSE 3702 Score Reading (3)
MUHL 4406 Twentieth Century Music (3)
MUTC 4599 Senior Composition Recital (3)
MUAP 3402 Contemporary Chamber Players (2)

d. Music History: ***(45 hours)***

Individual instruction in applied music (10)
MUHL 4259 Studies in Bibliography (3)
Concentration electives chosen in consultation with major advisor (11)
Advanced Music History (12)
Foreign Language; 6 semester hours in addition to requirements for admission (6)
MUHL 4999: Senior Project in Music History (3)

e. School Music: ***(55-57 hours)***

Core: ***(34 hours)***

MUSE 1101 Class Instruction in Brass Instruments (1)
MUSE 1103 Class Instruction in Percussion Methods (1)
MUSE 1104 Class Instruction in Woodwind Instruments (1)
MUSE 1116 Class Instruction in Stringed Instruments (1)
EDPR 2111 Development Across the Life Span (3)
LEAD 2010 Schooling in Multicultural Settings (3)
ICL 3000 Principles of Teaching (3)
SPED 2000 Intro to Exceptional Learners (3)
ICL 4800 Professional Seminar (See Note) (3)
ICL 4911 Student Teaching (9)
MUAP 4998 Senior Performance Project **[I]** (3)
MUSE 4213 Materials and Methods of General Music (2)
MUSE 4214 Clinical Experience in Materials and Methods in General Music (1)

Instrumental Emphasis: ***(21-23 hours)***

MUSE 1112 Class Instruction in Voice (1)
MUSE 4700 Instrumental Conducting (2)
MUSE 4205 Marching Band Techniques (not required for String majors) (2)
Applied Music: at least 2 hours at the upper division level (12)
MUSE 4303 Materials and Methods of Instrumental Music, K-8 (2)
MUSE 4304 Clinical Experience in Materials and Methods of Instrumental Music, K-8 (1)
MUSE 4403 Materials and Methods of Instrumental Music, 9-12 (2)
MUSE 4404 Clinical Experience in Materials and Methods of Instrumental Music, 9-12 (1)

Choral Emphasis: ***(22-23 hours)***

MUSE 1112 Class Instruction in Voice (1)
(Not required of students enrolled in applied voice.)
MUSE 4211 Vocal Diction I (2)
MUSE 4701 Choral Conducting (2)
Applied Music: at least 2 hours at the upper division level (12)
MUSE 4305 Materials and Methods of Choral Music, K-6 (2)
MUSE 4306 Clinical Experience in Materials and Methods of Choral Music, K-6 (1)
MUSE 4405 Materials and Methods of Choral Music, (7-12) (2)
MUSE 4406 Clinical Experience in Materials and Methods of Choral Music, 7-12 (1)

4. **Music Electives:** at least 6 semester hours in upper division music courses selected from a concentration area other than the one chosen for the major.

5. **Elective Courses** to bring the total to a minimum of 132 semester hours (134 for students in School Music). These courses will be chosen by the student in consultation with the advisor and major professor.

BACHELOR OF ARTS

To qualify for the degree of Bachelor of Arts the student must complete a minimum of 132 semester hours with a grade point average of 2.0. Of the 132 semester hours required for graduation, at least 42 semester hours must be in courses from the Upper Division. No more than 42 semester hours in any one subject will be counted toward a degree.

GENERAL EDUCATION AND B.A. DEGREE REQUIREMENTS

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication (3 hours): COMM 2381.

Foreign Language (6 hours): Two courses in a single foreign language at or above the 2000 level.

Mathematics (6-10 hours): MATH 1181 and 1182; or MATH 2000; or MATH 1312 or 1321 (4); plus one additional course chosen from any MATH course numbered 1211 or higher (except MATH 1601), or PHIL 1611.

Literary Heritage (6 hours): ENGL 2201 or 2202, plus one course chosen from: CLAS 3412, 3413, 3414; ENGL 3100-09, 3210, 3211, 3212, 3213, 3214, 3220, 3221, 3222, 3224, 3321, 3322, 3323, 3411, 3412, 4231, 4232, 4233, 4234, 4241, 4242, 4251, 4252, 4321, 4322, 4323, 4341, 4342, 4371, 4423, 4424, 4441, 4451, 4461; FREN 3411, 4412; GERM 3411, 3412, 4443, 4451, 4465; GREK 3111, 3511, 3911, 4441; LALI 4010, 4493; LATN 3111, 3211, 3912, 4411, 4711; RUSS 3441, 3442, 3443; SPAN 4410, 4431, 4432, 4510, 4561, 4562; THEA 4582.

Fine Arts Heritage (6 hours—must select two different disciplines): One course from: ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551; plus one course from the previous list or from: ART 2101, THEA 4551, THEA 4552, DANC 3101, MUHL 4800.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (12 hours): One course from list A, one course from list A or list B, and two courses from lists A, B, or C (no more than 6 hours from any one discipline):

A. ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101 /CSED 2101, UNIV 2304.

B. ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

C. COMM 1780; CJUS 3510; GEOG 3430, 4304, 4313, 4324, 4431; HIST 4871; JOUR 1700; POLS 3213, 3216, 3506; PSYC 1102; SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923.

Natural Science (11-12 hours): One sequence from list A plus one course in a different science chosen from list A or list B: NOTE: *If a course has a lab, the lab must be taken to complete this requirement.*

A. BIOL 1071, 1072, 1081, 1082; BIOL 1151, 1152, 1161, 1162; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1001, 1011, 1002, 1022; GEOL 1101, 1103; PHYS 1001, 1010, 1002, 1020; PHYS 2003, 2510, 2004, 2520; UNIV 1610,1611.

B. GEOG 1003, 3221, 4201, 4211, 4231, 4241; PHYS 2001, 2110; PSYC 3306.

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course, DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: This requirement may be satisfied by taking COMP 1200, by course of study approved by the dean, or by passing a university-approved computer literacy examination.

Major: Completion of requirements for one of the majors listed below.

Electives: to bring the total to 132 semester hours.

DEPARTMENTAL REQUIREMENTS FOR MAJORS AND MINORS

The Department of Art

ART

The Major: (See B.F.A. degree.)
The Minor: (See B.F.A. degree.)

ART HISTORY

The Major: 36 semester hours in art history courses, including ART 2101, 2102, 4195, and one upper division course each from five of the following art history categories: Ancient, Medieval, Renaissance, Baroque, Modern European, American, and non-European art. A minimum of 6 hours in studio art is also required.

The Minor: (See B.F.A. degree.)

PHOTOGRAPHY

The Minor: (See B.F.A. degree.)

The Department of Communication

COMMUNICATION

The Major

All students must take COMM 1780, 2381, and one of: COMM 3861, 4360, or 4850. In addition, all students must fulfill the requirements for one of the following concentrations:

Select one of the following concentration areas:

BROADCAST AND ELECTRONIC MEDIA: 36-37 semester hours, including COMM 3800; 4857; three of: COMM 4810, 4811, 4812, 4831, or 4871; two of: COMM 3321, 3322, 3330, 3371, 4011, 4013, or 4854; one of: COMM 3820, 3821, or 3823; and three additional hours in Communication.

COMMUNICATION: 36 semester hours, including COMM 3321; 4381; one of: 3322, 4704; 3330; and 15 additional hours in Communication.

FILM AND VIDEO PRODUCTION: 33 semester hours, including COMM 3823; 3824; 3842; three of 4822, 4824; 4825, 4841, 4842, 4891, 4960, or 4970; one of: (Selection may not include course used to satisfy core) COMM 3861, 4220-29, 4850, 4851, 4853, 4854, 4856, 4857, or 4858.

The Minor: Any student wishing to minor in any area in the Department of Communication should see the department chair who will assign an appropriate advisor. The minor must consist of at least 18 hours of approved coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

HONORS PROGRAM

The Honors Program offers superior students the opportunity to engage in an intensive and individualized course of study leading to a Bachelor of Arts degree with Departmental Honors. The program enables honors students to develop their particular talents, interests, and abilities within a curriculum designed to encourage academic independence and creativity.

Admission: To be eligible for admission into the Honors program, a student must meet the following requirements: (a) the completion of 55 semester hours of college course work (or Junior standing), (b) an overall grade point average of 3.25 or better, and (c) a departmental grade point average of 3.25 or better. Students who have not met all of these requirements may apply for admission into the program, and their applications will be considered on a "provisional admittance" basis. Applications may be obtained from the Director of the Honors Program or from the main office of the department. Completed applications should be submitted to the Director of the Honors Program at least two weeks before the end of each semester. Students may be admitted to the program at the end of any semester (including summer semesters).

Requirements: To graduate with departmental honors, an honors student must fulfill the following requirements:

(a) The completion of at least 18 hours of honors work. Twelve of these hours must be in upper division departmental honors work, and a maximum of 6 hours may be in lower division or extra-departmental honor work.

(b) The completion of an honors project or thesis in the senior year.

(c) The maintenance of an overall grade point average of 3.0 and a departmental grade point average of 3.25.

An honors student may earn departmental undergraduate honors credit in three ways: (1) by taking COMM 4980, "Honors Studies" (for a maximum of 15 hours credit); (2) by taking COMM 4999, "Senior Honors Thesis" (for a maximum of 6 hours); and (3) by taking COMM 4982, "Honors Seminar" (for a maximum of 9 hours) for a combined total of no more than 18 hours. This will allow honors students to enroll in those departmental seminars that most specifically reflect their particular interests in theatre and communication. An honors student majoring in any field of concentration in the department will be able to substitute honors credit for certain track requirements for graduation. Contracting for honors credit in other courses or enrolling in Independent Study or Special Problems courses will not fulfill Honors Program requirements.

After completing 6 hours of Honors Studies, honors students may begin work on their projects or theses. These projects will be under the direct supervision of the Director of the Honors Program although students may ask any member of the departmental faculty to sit on their committees (three faculty members will sit on each student's committee). Typically, an honors student earns 6 hours of credit for the project, 3 of which reflect a semester of research or preparation, while the final 3 hours reflect a semester of writing or assembling the project. The honors project does not have to be a thesis; the nature of the project will depend on the student's interests, talents, and course work and will be decided on an individual basis by the Director of the Honors Program.

For further information about the Honors Program, contact the chair, Department of Communication.

The Department of Journalism

The Department of Journalism

JOURNALISM

The Journalism major at The University of Memphis offers preparation for careers in advertising, broadcast journalism, print journalism, and public relations. The journalism student is required to take career-oriented skills courses to enhance writing, editing, and graphic abilities, as well as theory courses to broaden the student's philosophical understanding.

Journalism graduates typically work as newspaper or television reporters and photographers, editors and anchors, advertising executives, public relations professionals, and freelance writers and producers. No matter which concentration is selected, each student journalist requires a strong background in liberal arts and an understanding of the social sciences to augment his or her professional skills. Consequently, no more than 42 hours of journalism courses may be included in the 132 hours required for graduation. The remainder of the student's course work must follow the guidelines provided by the university to qualify for a Bachelor of Arts degree.

Practical experience is available on *The Helmsman* newspaper, radio station WUMR, and campus TV newscast productions. Additionally, Journalism students may participate in one of the following activities: University Public Information Office, Athletic Publicity Office, Alumni Publicity Office. Qualified majors will be chosen for senior-year internships with Memphis newspapers, magazines, advertising and public relations agencies, and broadcasting stations.

NOTE: Sophomore standing or permission of instructor required for courses at the 2000 level and above. JOUR 2121, which requires typing proficiency, is a prerequisite for journalism majors taking more advanced writing courses in the program. Students must pass the Journalism Department's Writing Proficiency Exam before enrolling for JOUR 2121. This test is offered several times during the year. Prerequisite journalism courses, including JOUR 2121, must be completed with a minimum grade of C before moving on to any course in the program to which the prerequisites are applied.

Students majoring in journalism may select only one concentration and may not simultaneously complete within the 132 hours required for the Bachelor of Arts degree, the concentration in film and videotape production within the theatre and communication arts major. Of the 132 hours required for graduation, 90 hours must be other than journalism or journalism skills related courses. *Of these 90 hours, at least 65 hours must be in liberal arts.* Twelve semester hours in a secondary area of emphasis, outside the Department of Journalism, approved by the student's advisor, is recommended.

In order to be in compliance with the Accrediting Council on Education in Journalism and Mass Communication accreditation standards, U of M will accept no more than 12 semester hours or the equivalent in journalism courses for transfer from community colleges to be applied toward the degree.

The Major:

Journalism Core

Required of all students majoring in journalism—12 to 15 hours): JOUR 1700, 2121, and 4700. Advertising, Broadcast News and Public Relations students will take one of the following: 4702, 4708, or 4712. News Editorial students will take two of the following: 3700, 4702, 4708, or 4712.

Journalism Concentrations

Advertising *(27 hours):* JOUR 3300, 3322, 3324, 3345, 3900, 4327, 4328; JOUR 3400 or 4330; MKTG 3010.

Broadcast News *(22 hours):* JOUR 3625, 4120, 4629, 4639, 4655; COMM 3801, 3821.

News Editorial *(21 hours):* JOUR 2123, 3120, 3123, 3900, 4124, and one of the following combinations: JOUR 4120 and 4125, or JOUR 3205 and 4214.

Public Relations *(39 hours):* JOUR 3400, 3410, 3421, 3900, 4420, and 4440; COMM 3322; MGMT 3110, 4420; MKTG 3010; one course from among: JOUR 3123, 3124, 3205 or 3625; and one course from among: JOUR 3300, 3712, 4430, or COMM 3802.

The Minor:

Students may qualify for a minor in general journalism by completing 18 semester hours in journalism courses, including JOUR 1700, 2121, 4700, and 9 additional semester hours selected from the upper division.

The Department of Music

MUSIC

The Major: (See B.M. degree.)

The Minor: (19 hours)

Theory: MUTC 1008, 1009	(6 hours)
History: MUHL 3301 or 3302	(3 hours)
Applied: Individual instruction in voice or an instrument (minimum of two semesters; major group is not applicable.)	(4 hours)
Large Ensemble:	(2 hours)
Applied Music Workshop:	(1 hour)
Music electives:	(3 hours)

Communication and Fine Arts Course Descriptions

COMMUNICATION/FINE ARTS (CCFA)

3001. Arts in Education. (3). Integrates art, music, and drama with other subject areas to stimulate creativity and build positive attitudes.

Students who wish to apply for credit for experiential learning may obtain guidelines from the Dean of the College of Communication and Fine Arts. Fees for this credit are listed in *Fees and Charges*.

1900. Introductory Level Experiential Learning in (descriptive title).

2900. Intermediate Level Experiential Learning in (descriptive title).

3900. Advanced Level Experiential Learning in (descriptive title).

ART

ASSOCIATE PROFESSOR
ROBERT E. LEWIS, *Chair*
Room 201, Jones Hall
http://www.people.memphis.edu/~artdept/artdept.html

Transfer students seeking advanced standing in art are required to submit a portfolio.

In addition to specific prerequisites, junior standing or permission of the instructor is a prerequisite for all 3000 and 4000 level courses in the Department of Art.

ART (ART)

1101. Introduction to Art. (3). Fundamental principles of artistic expression as basis for understanding Western and non-Western traditions in the visual arts. **[G]**.

1201. Basic Design. (3). Basic design factors of line, value, texture, form, and space in problem solving approach to stimulate student's visual perception and to encourage inventive manipulation of tools, materials, and techniques. Development of vocabulary for professional practice encouraged through lectures. discussions, and class critique.

1204. Color Fundamentals. (3). Light and color in relation to form. Mixing of colors and notation of hue, value, chroma relationships. Interaction of color; color harmony, psychology, and symbolism in a variety of mediums. PREREQUISITE: ART 1201.

1210. Two-Dimensional Design. (3). Elements and principles of visual design studies through a problem-solving approach. Encourages perceptual growth through the use of varied tools, materials, and techniques. **NOTE:** *Students may not receive credit for both ART 1210 and 2201.*

1215. Three-Dimensional Design. (3). Exploration of design elements and principles as applied to development of three-dimensional construction. Imaginative and fundamental use of materials in visual problem solving. **NOTE:** *ART 1215 may be used for the purpose of improving a grade in ART 2202.* PREREQUISITE: ART 1210.

1233. Introduction to Interior Design. (3). Processes of interior design and various aspects and considerations involved in practice of both residential and commercial design.

1311. Beginning Drawing. (3). Introduction to materials and techniques of basic drawing. Study of still life and nature to develop perception of line, value, space, and volume. Use of contour and gesture.

1314. Figure Structure. (3). Use of basic drawing materials and techniques. Analysis and rendering of the human form, including work from skeleton and from female or male models; study of anatomy and proportion. Emphasis on contour, gesture, value, and volume. PREREQUISITE: ART 1311.

2101. World Art I. (3). Development of visual arts from prehistoric times through medieval period, their use by man as social, cultural, and educational force; brief survey of art of Far East.

2102. World Art II. (3). Continues (but does not presuppose) World Art I; development of visual arts from medieval period through Renaissance to present.

2201. Design. (3). Continued study of the elements of design, using variety of materials and methods. **NOTE:** *Students may not receive credit for both ART 2201 and 1210.* PREREQUISITES: ART 1201 and 1204, or permission of instructor.

2213. Typographic Design I. (3). Terminology, technology, and design aspects of typography for effective communication. PREREQUISITE: ART 1210 or permission of instructor.

2221. Graphic Production and Processes I. (3). Introduction to materials and processes of graphic design with attention to manual skills necessary to prepare comprehensive layouts and camera-ready art. PREREQUISITE: ART 1210 or permission of instructor.

2223. Computer Assisted Graphic Design. (3). Introduction to computer graphic design. Includes an overview of technical and aesthetic issues relevant to graphic design profession.

2233. Interior Drafting Practices. (3). (2231). Introduction to equipment, standards and requirements of interior design drafting practices through lecture and space planning and production of working drawings.

2234. Interior Color and Composition. (3). (2232). Application of color theory and design-composition to specific requirements of interior design practice, through lectures and studio assignments. PREREQUISITES: ART 1233, 2233; or permission of instructor.

2238. CADD for Interior Design. (3). Introduction to use of microcomputer software in production of interior design drawings and documents. Exploration of computer applications in design development and presentation. PREREQUISITE: ART 2233.

2301. Introduction to Digital Art. (3). An introduction to computer graphics and its application in field of Art. Use of standard hardware and software to solve creative problems. Exploration of current issues and computer history. PREREQUISITES: ART 1210, 1311; or permission of instructor.

2313. Drawing and Composition. (3). Problems in visual communication; emphasis on compositional and technical considerations. Analytical and objective investigations of organizational problems. Use of varied graphic media and methods. PREREQUISITES: ART 1311 and 1314, or permission of instructor.

2314. Drawing and Concept. (3). Problems in visual communication; emphasis on personal expression. Conceptual and subjective investigation of individual problem-solving strategies. Use of varied graphic media and methods. PREREQUISITE: ART 2313 or permission of instructor.

2331. Painting I. (3). (3331). Preliminary course in theory and practice of oil painting.

2351. Introduction to Printmaking. (3). Printmaking processes: relief, intaglio, planography, and stencil, focusing on relief and screenprinting.

2352. Introduction to Intaglio and Lithography. (3). Monochrome metal plate intaglio and stone lithography. Intaglio includes etching, engraving, and acquatint. Lithography includes crayon, wash, and transfer. Emphasis on personal expression.

2414. Primary School Art Practicum. (1). Observation and art teaching in a local K-4 classroom. Includes campus-based seminars. PREREQUISITE: Art major and permission of instructor. (S/U).

2511. Sculpture I. (3). Introduction to basic materials and techniques of sculpture. PREREQUISITE: ART 1215 or permission of instructor.

2523. Ceramics I. (3). (3523). Introduction to clay and ceramic process. Emphasis on thoughtful, purposeful exploration of medium, regarding both pottery vessel and nonvessel object.

2701. Photography I. (3). (3224). Basic techniques and processes of black and white still photography. History and aesthetics of photography as fine art. Emphasis on personalized perception and seeing photographically. **NOTE:** *Prospective students are advised to obtain a list of course expenses from the Art Department before registering.*

2702. Photography II. (3). (4224). Exploration of black and white still photography as means to personal expressive statement and self-discovery. Assignments emphasize a broad range of contemporary photographic practice. PREREQUISITE: ART 2701 or permission of instructor.

3103. History of Furniture and Interiors I. (3). (3101). Emphasis on Renaissance, Baroque, Rococo and Neo-Classical periods.

3104. History of Furniture and Interiors II. (3). (3102). 19th and 20th century survey; emphasis on development of period revivals, Art Nouveau, Art Deco, International Style and other innovations in Europe and America.

3204. Housing and Equipment. (3). (HMEC 4203, 3204). (Same as CSED 3204). Socioeconomics and design aspects of housing; kitchen planning principles: selection, use, and care of household equipment. PREREQUISITE: CSED 2104.

3213. Typographic Design II. (3). Advanced problems involving visual organization and typography as an expressive design element. PREREQUISITE: ART 2213 or permission of instructor.

3221. Visual Thinking. (3). Fundamental methods in generating ideas for effective visual communication. PREREQUISITE: ART 2213 or permission of instructor.

3222. Graphic Design Methodology. (3). Emphasis on intellectual processes underlying applied design. PREREQUISITE: ART 3221 or permission of instructor.

3225. Computer Graphics. (3). Hands-on training in use of graphics hardware and software in design and production of commercial graphics, illustrations and animation.

3227. Graphic Production and Processes II. (3) (2222). Methods of preparing art for reproduction with emphasis on Macintosh electronic pre-press. PREREQUISITE: ART 2221.

3233. Components of Interiors. (3) (3231). Technical aspects of surface and structural materials of interior design in relation to building codes and public health, safety and welfare. PREREQUISITE: ART 1233 or permission of instructor.

3234. Interior Design Studio I. (3). (3232). Application of material covered in basic interior design courses to theoretical designs for complete environments. Design development, production of working and presentation drawings and specifications studied through lectures and studio projects. PREREQUISITES: ART 2238, 2234, 3233, 3235, 3236, 3237, 3312; or permission of instructor.

3235. Commercial Lighting Design. (3). (4234). Comprehensive study of lighting sources and principles, color and applications, including circuiting, switching, dimming systems, task-ambient lighting and industry resources. Zonal cavity method and point source calculations applied through lectures and studio assignments. PREREQUISITES: ART 2233, 2234; or permission of instructor. **[C]**.

3236. Rendering for Interiors. (3). (4233). Comparative application of variety of techniques using black-white and color mediums for interior perspective illustration. Lectures and studio assignments in line, texture, shade-shadow, volume, color and freehand drawing. PREREQUISITES: ART 2233, 2234, 3312; or permission of instructor.

3237. Interior Construction Drafting. (3). (4551). Principles of building construction and their application through development of working drawings for both residential and commercial projects. Building

methods and materials studied through lectures and studio assignments. PREREQUISITE: ART 2233, or permission of instructor.

3238. Interior Detail Drawing. (3). (4552). Design and drawing of interior millwork and casework. Production and specification for construction studied through lectures and studio assignments. PREREQUISITE: ART 3237 or permission of instructor.

3312. Interior/Perspective Drawing. (3). Various perspective systems applied to one- and two-point drawing techniques for interior design. PREREQUISITES: ART 1311.

3332. Painting II. (3). Continuation of ART 2331; attention to essentials of still-life, landscape, and portrait painting.

3351. Intaglio Printmaking. (3). In-depth study of metal plate intaglio printmaking processes: engraving, drypoint, etching, aquatint, and color intaglio. Includes mixed media. Emphasizes personal expression. PREREQUISITE: ART 2352 or permission of instructor.

3352. Lithography (3). In-depth study of lithography in monochrome and color from stone and aluminum plates. Includes mixed media color printing. Emphasizes personal expression. PREREQUISITE: ART 2352 or permission of instructor.

3411. Art for Children. (3). Introduction to skills and methods for instructional art programs in studio and art appreciation activities; emphasis on materials and ideas for children's art expression and development.

3416. Middle School Art Practicum. (1). Observation and art teaching in a local 5-8 classroom. Includes campus-based seminars. PREREQUISITE: Art major and permission of instructor. (S/U).

3423. Art For Secondary Schools. (3). Studio activities and related art education issues relevant to the artistic development of adolescents. Emphasizes multicultural concerns and art evaluation systems. PREREQUISITES: ART 2101, 2102, 3411; or permission of instructor.

3431. Multicultural Art and Design. (3). Studio activities combining visual art traditions of world cultures with innovative expression. Includes emphasis on non-European sources for contemporary art works. PREREQUISITES: ART 2101, 2102, 2313, or permission of instructor.

3511. Sculpture II. (3). Problems of sculptural form as expressed in metal, wood, and related materials.

3512. Sculpture III. (3). Continuation of ART 3511; emphasis on techniques.

3524. Ceramics II. (3). Some consideration to fundamental historical and aesthetic aspects peculiar to ceramics as a studio medium. PREREQUISITE: ART 2523 or permission of instructor.

3701. Photography III. (3). Continuation of ART 2702. Closer examination of several key photographers' work as point of departure for student work. How student work relates to traditions. PREREQUISITE: ART 2702 or permission of instructor.

4010-19-6010-19. Special Topics in Studio Art. (1-3). Topics are varied and announced in *Schedule of Classes. May be repeated to a maximum of 9 hours when topic varies.*

4020-29-6020-29. Special Topics In Art Education. (1-3). Topics are varied and announced in *Schedule of Classes. May be repeated to a maximum of 9 hours when topic varies.*

4030-39-6030-39. Special Topics in Art History. (1-3). Topics are varied and announced in *Schedule of Classes. May be repeated to a maximum of 9 hours when topic varies.*

4111-6111. Art and Archaeology of Egypt. (3). Predynastic to Late Period. PREREQUISITE: ART 2101 or permission of instructor. **[W].**

4112-6112. Egyptian Art and Archaeology in the Old and Middle Kingdom. (3). Art, architecture, and archaeology, 3000-1500 B.C. PREREQUISITE: ART 2101 or permission of instructor.

4113-6113. Egyptian Art and Archaeology in the New Kingdom and Late Period. (3). Art, architecture, and archaeology, 1500 B.C.-642 A.D. PREREQUISITE: ART 2101 or permission of instructor.

4121-6121. Ancient Art of the Near East. (3). Architecture, sculpture, painting, and the minor arts in Mesopotamia, Anatolia, and Syria-Palestine. PREREQUISITE: ART 2101 or permission of instructor.

4123-6123. Greek Art. (3). Architecture, sculpture and painting from the Bronze Age to the end of the Hellenistic period.

4124-6124. Roman Art. (3). Architecture, sculpture and painting from Etruscan Rome to the fall of the Empire.

4125-6125. Art and Archaeology of Pompeii. (3). Pompeii's excavations, art, artifacts and architecture in reconstructing ancient Roman daily life. **[W].**

4129. Studies In Ancient and Medieval Architecture. (3). Selected topics comparing the architecture of ancient Egypt, the Classical world, and Medieval Europe. PREREQUISITE: ART 2101. **[C].**

4130-6130. Art of the Medieval World. (3). Architecture, sculpture, and painting, including manuscript illumination of the middle ages. Includes Western European and Byzantine traditions. PREREQUISITE: ART 2101 of permission of instructor.

4131-6131. Art of the Early Middle Ages. (3). Advanced study of architecture, sculpture and painting of the early medieval period. PREREQUISITE: ART 2101 or permission of instructor.

4134-6134. Art of High Middle Ages (3). Advanced study of architecture, sculpture and painting, including manuscript illumination, ivories and stained glass in the Romanesque and Gothic periods. PREREQUISITE: ART 2101 or permission of instructor.

4141-6141. Art of the Early Renaissance in Italy. (3). Architecture, sculpture and painting of Italy, 1300-1510. PREREQUISITE: ART 2101 or permission of instructor.

4142-6142. Northern Renaissance Art. (3). Fifteenth Century Art in Northern Europe; emphasis on panel painting, manuscript illumination and printmaking. PREREQUISITE: ART 2101 or permission of instructor.

4143-6143. Art of the High Renaissance in Italy. (3). Sixteenth Century Art in Italy; highlights works of Michelangelo, Raphael, Titian, and the Mannerists. PREREQUISITE: ART 2102 or permission of instructor. **[W].**

4146-6146. Baroque Art. (3). Architecture, sculpture, and painting produced in Europe during Seventeenth Century. PREREQUISITE: ART 2102 or permission of instructor.

4151-6151. Nineteenth Century Art. (3). Art movements of Nineteenth Century from Neo-Classicism to Impressionism. PREREQUISITE: ART 2102 or permission of instructor.

4154-6154. Modern Art. (3). Major developments in European painting and sculpture from 1890's until World War II; includes Fauvism, Cubism, and Surrealism. PREREQUISITE: ART 2102 or permission of instructor.

4156-6156. Art Since 1945. (3). Major art movements and contemporary schools of criticism from World War II to present. Major trends examined include Abstract Expressionism, Pop Art and Earth Art. PREREQUISITE: ART 2102 or permission of instructor.

4158-6158. Modern Architecture. (3). Survey of 19th century styles, 20th century masters, and contemporary developments in architecture; includes historic preservation.

4160-6160. Architecture and Nature. (3). Survey and analysis of spaces in a variety of cultures from world history where the relationship between the natural and the built environment is healthy.

4162-6162. Latin American Art. (3). Hispanic arts of the Americas from 1500 to the present in relation to Iberian and Indian traditions.

4163-6163. Pre-Columbian Art. (3). Ancient art of Mexico, Central America and South America from about 1000 B. C. to European contact.

4166-6166. Art of the United States. (3). (4167, 4168). Survey of American painting, sculpture and art theory from colonial period to 1945. PREREQUISITE: ART 2102 or permission of instructor.

4181-6181. Traditional Arts of Africa, Oceania and North America. (3). Survey of the arts created by native Americans of U.S. and Canada, peoples of sub-Saharan Africa and Pacific islands, examined in relation to their cultural context and heritage.

4195. Proseminar In Art History. (3). Investigation of selected topics in art history with emphasis on development of research techniques and methodologies. Oral presentation and writing of thesis paper. PREREQUISITE: senior status with 18 semester hours in art history **[I].**

4211-6211. Writing and the Design Process. (3). (3211). Focus on synthesis of verbal and visual problem-solving methods and the use of writing as integral phase of design process. PREREQUISITE: ART 3213 or permission of instructor. **[W].**

4221-6221. Graphic Design for Print Communications. (3). Practical problems in areas of publication, information, corporate and promotional design. PREREQUISITES: ART 3213, 3222 or permission of instructor.

4222-6222. Interactive Multimedia for Graphic Design. (3). Introduction to time-based, electronic media in graphic design. Explores impact of electronic interface on visual communication. Emphasis on visual design of narrative, commercial, editorial and/or educational multimedia presentations on computer. PREREQUISITE: ART 3221 or permission of instructor.

4223-6223. Specialized Studies In Graphic Design. (3). Advanced instruction in either illustration, typography and publication design, 3-dimensional design, corporate and promotional design, or information graphic design. *May be repeated to a maximum of 12 hours when topic varies.* PREREQUISITE: ART 3213, 3222; or permission of instructor.

4224-6224. History of Graphic Design. (3). Cultural, theoretical, and stylistic aspects of major movements in the field of graphic design in Europe and America from Industrial Revolution to present. PREREQUISITE: ART 2101, 2102; or permission of instructor.

4230. Graphic Design Internship. (3). Practical experience in visual communication within approved professional work environment. PREREQUISITE: ART 4221 and recommendation from advisor.

4232-6232. Visual Design Business Practices. (3). Application of principles, procedures, and business practices of visual design. PREREQUISITE: junior standing or permission of instructor.

4233-6233. Design Practice Studio. (3). Work under faculty supervision on projects for institutional and corporate clients; assist in developing publications, exhibits, signage and other graphics, and participate in professional design process from project inception to completion. *May be repeated to a maximum of 12 hours with approval of advisor, but not for the purpose of improving a grade previously earned.* PREREQUISITE: senior standing. Admission by portfolio review only.

4235. Graphic Design Portfolio Seminar. (3). Methodology and techniques in graphic design applied to an extended visual communication project. Written proposal, preparation of comprehensive layouts and oral/visual presentation of project. PREREQUISITES: art major with concentration in graphic design and senior status. **[I].**

4237-6237. Interior Design Studio II. (3). (4231). Comprehensive assignment in commercial design including design development, space planning, building code requirements, and construction and specification documentation for barrier-free design studied through lectures and design assignments. PREREQUISITES: ART 3234 or permission of instructor.

4238-6238. Interior Design Studio III. (3). (4232). Further advanced studio assignments in commercial interior design studied through lectures and design projects. PREREQUISITES: ART 3238, 4237; or permission of instructor.

4239-6239. Interior Design Business Practices. (3). (4235). History and organization of interior design profession, study of business methods and practices, and formulation of resume and design

portfolio. PREREQUISITE: ART 3234 or permission of instructor.

4240-6240. Interior Design Internship. (3). (4236). Supervised apprenticeship in interior design industry. Placement requires approval of Interior Design faculty. PREREQUISITES: ART 3234 and permission of instructor.

4241-6241. Nineteenth Century Furniture Analysis. (3). Identification of antique American furniture by period and style. Research involves actual furniture in a house museum collection.

4251. Interior Design Senior Project. (3). Addresses creative, professional, technical, and historical issues involved in problem chosen and defined by student. Culminates in formal presentation of unique solution to problem. PREREQUISITE: ART 4238 or permission of instruction.

4321-6321. Drawing and Painting I. (3). Advanced drawing and painting methods; emphasis on transparent watercolor. PREREQUISITE: ART 2313 or permission of instructor.

4322-6322. Drawing and Painting II. (3). Continuation of ART 4321; attention to various mixed media. PREREQUISITES: ART 2313, 4321; or permission of instructor.

4331-6331. Painting III. (3). Advanced problems in oil painting, presupposing that student has mastered basic techniques and is ready for a more experimental approach to subject. PREREQUISITES: ART 2331, 3332; or permission of instructor.

4332-6332. Painting IV. (3). Continuation of ART 4331; emphasis on development of personal style. PREREQUISITES: ART 2331, 3332, 4331; or permission of instructor.

4341-6341. Image Design. (3). Synthesis of graphic design and illustration. Includes a technical emphasis on computer imaging. PREREQUISITE: ART 3221 or permission of instructor.

4351-6351. Advanced Printmaking I. (3). Specialization in one or two printmaking media with emphasis on development of personal imagery and technical skills. PREREQUISITES: ART 2351, 3351 or 3352; or permission of instructor.

4352-6352. Advanced Printmaking II. (3). Advanced work in one or two printmaking media with continued development of personal imagery and advanced technical skills. PREREQUISITES: ART 2351, 3351 or 3352, and 4351; or permission of instructor.

4353-6353. Computer Imaging in Printmaking/ Photography I. (3). Use of digital imaging in one of several output options including: lithography, screenprinting, etching, silver and non-silver photographic processes. Emphasis on personal expression PREREQUISITES: A computer course and either of the following: ART 2701, 2351; or permission of instructor.

4354-6354. Computer Imaging in Printmaking/ Photography II. (1-3). Advanced project using digital imaging. Proposal for study to be approved in advance. Emphasis on personal expression. PREREQUISITE: 4353 or 6353; or permission of instructor. *May be repeated to a maximum of 6 hours.*

4380-6380. Museums in Society. (3). (Same as ANTH 4380). History of museums and how they function in society. Development of major collections and role of museums as centers of research and education and interpreters of social values.

4381-6381. Art Curatorial Techniques. (3). Curatorial responsibilities and functions: receiving and shipping methods, registration, physical and environmental security, research, conservation, and study of art market and publications.

4382-6382. Professional Practices in Museums. (3). (Same as ANTH 4382). Basic aspects of museum organization. Examines roles of directors and trustees, responsibilities of professional staff including registrars and curators, and scope of museum education programs. Features presentations by museum professionals. **[W]**.

4384-6384. Museum Internship. (3-6). Approved internship with cooperating museum or gallery, emphasizing curatorial, program and/or operational duties. PREREQUISITES: permission of the instructor and one of the following or the equivalent: ART 4380, 4381 or 4382.

4410-6410. Art Education Independent Study. (1-3). Theoretical and pragmatic ideas relevant to teaching of art. *May be repeated to a maximum of 6 hours.* PREREQUISITES: ART 3411, 3423; or permission of instructor.

4418. High School Art Practicum. (1). Observation and art teaching in a local 9-12 classroom. Includes campus-based seminars. PREREQUISITE: Art major and permission of instructor. (S/U).

4427. Methods and Materials for Art Instruction. (3). Curriculum planning, resources, and standards for art program goals, budget, and facilities. Includes current art education philosophy and research. PREREQUISITES: ART 2414, 3416, 3423; or permission of instructor.

4511-6511. Sculpture IV. (3). Advanced work in various sculptural media. PREREQUISITES: ART 2511, 3511, 3512; or permission of instructor.

4512-6512. Sculpture V. (3). Continuation of 4511; emphasis on personal expression. PREREQUISITE: ART 4511 or permission of instructor.

4521-6521. Ceramics III. (3). Advanced studies in ceramic process and technique. Concentration on development of personal attitudes toward work. PREREQUISITE: ART 3524 or permission of instructor.

4522-6522. Ceramics IV. (3). Technical competence and the production of ceramic objects reflective of genuinely personal involvement. PREREQUISITE: ART 4521 or permission of instructor.

4610. Senior Studio. (3). Studio production and associated research that interrelates historical, technical, and aesthetic components of visual art. Contract for study project to be approved by instructor and faculty committee in semester prior to registration. PREREQUISITES: Art major, senior status with concentration in Art Education; Ceramics/Painting/ Printmaking/Sculpture; or Photography. **[I]**.

4611. Senior Problems. (3). Original research in student's area of concentration, extent of the project to be approved by art faculty.

4621-6621. Workshop In Art I. (1-3). Specific art problems as they apply to individual student; emphasis on basic art concepts and creative experience. PREREQUISITE: permission of instructor.

4622-6622. Workshop in Art II. (1-3). Continuation of ART 4621, providing study of problems appropriate to need of individual student. PREREQUISITE: permission of instructor.

4641-6641. Study and Travel In Art. (3 or 6). Travel to important art areas of world and specialized study under direction of faculty member of Department of Art.

4650-6650. Professional Art Practices. (3). Development of skills needed for success as practicing professional artist, including portfolio preparation and presentation, marketing, contracts, copyrights, and alternative art careers.

4701-6701. Color Photography. (3). Exploration of photographic perception in color. Survey of history and aesthetics of color photography. Techniques of color photography; emphasis on color printing. PREREQUISITE: ART 3701, junior standing, or permission of instructor.

4702-6702. Photographic Materials and Processes. (3). Advanced technical course exploring creative potential in various contemporary photography materials, processes and techniques. Emphasis on aesthetic application of those materials and techniques. PREREQUISITE: ART 3701 or permission of instructor.

4703-6703. Alternative Photographic Processes. (3). (3702). Exploration of creative potential of archaic and non-traditional photographic processes such as Cyanotype, Gum Bichromate and Kwik-Print. PREREQUISITE: ART 3701 or permission of instructor.

4704-6704. Photographic LIghting. (3). Advanced theory, technique, and equipment used by professional photographers for black and white and color. Emphasis on aesthetic application in actual practice. PREREQUISITE: ART 3701 or permission of instructor.

4711. Advanced Photography Seminar. (1-3). Creation of a unified body of photographic work based on subject matter or formal problem. Contract for study project to be approved by instructor in semester prior to registration. *May be repeated to a maximum of 6 hours.* PREREQUISITE: ART 3701 or permission of instructor.

4712. Photography Portfolio Seminar. (1-3). Creation and production of bound book or portfolio containing student's photographs and written introduction. Contract for study project to be approved by instructor in semester prior to registration. *May be repeated 6 hours.* PREREQUISITE: ART 4711 or permission of instructor.

4721-6721. History of Photography I. (3). Historical and critical issues from photography's prehistory to World War I.

4722-6722. History of Photography II. (3). Historical and critical issues in photography from World War I to the present.

COMMUNICATION

PROFESSOR JOHN P. BAKKE, *Chair*
Room 143, Theatre and
Communication Arts Building

The Department of Communication offers a B.A. degree in Communication with concentrations in Broadcast and Electronic Media, Communication, and Film and Video Production.
NOTE: In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000- and 4000-level courses in the Department of Communication.

COMMUNICATION (COMM)

1211. Voice and Articulation. (3). Principles of effective voice usage. Emphasis on improving voice characteristics and diction.

1780. Introduction to Human Communication. (3). Principles and processes underlying all human communication. Study of communication models, communication purposes and breakdowns, and variables related to interpersonal, small group, intercultural, and public communication.

1781. Introduction to the Rhetoric of Mass Media. (3). Principles, values, forms, and effects of persuasive public communication. Consideration of rhetorical styles and effects in speeches, debates, documentaries, and dramatic and entertainment forms.

1851. Introduction to Film. (3). Comprehensive study of the forms, functions, and history of film art. Emphasis on developing student's critical skills and aesthetic appreciation through analysis of complex formal, social, historical, and cultural dimensions of the art of film. **[G]**.

2381. Oral Communication. (3). Principles and practice of basic oral communication forms with emphasis on listening and critical understanding related to contemporary mass media, especially television and film, and to public information and decision-making. **[G]**.

3321. Argumentation and Debate. (3). Theory of argumentation with emphasis on developing skills in analysis, reasoning, and use of evidence in various debate situations and understanding role of debate in public decision-making. PREREQUISITE: CQMM 2381.

3322. Theories of Persuasion. (3). Principles underlying any communication designed to influence attitudes or behavior. Includes approaches to motivation, perception, message structure, attention, reasoning, audience analysis, persuasibility, and attitude change. Items for analysis drawn from speeches, advertising, radio, television and film.

3330. Methods of Communication Analysis. (3). Examination and application of qualitative and quantitative methods of criticism and research. **[C]**. PREREQUISITE: CQMM 1780 or JQUR 1700.

3341. Discussion. (3). Study and practice of principles and techniques of discussion, dealing with current problems of wide interest and significance.

3342. Communication and Leadership. (3). Relationship between communication variables and leadership styles and effectiveness in various organizational and group settings.

3361. African-American Rhetoric. (3). (2361). Speeches and rhetoric of African-Americans. Emphasis on spokespersons such as Walker, Turner, Douglass, Washington, DuBois, Malcolm X, King, Davis, and Jackson.

3371. Freedom and Responsibility of Speech. (3). Development of freedom of speech as Western value and attendant problems of ethical practice, limitations, and responsibility.

3800. Elements of Broadcasting and Electronic Media. (3). (3881). Survey of broadcast and electronic media dealing with technology, history, programming, economics, advertising, and regulation.

3801. TV Production Techniques for Journalists. (4). For majors in the broadcast journalism sequence; basic principles and techniques of video production. Production exercises. PREREQUISITE: permission of instructor.

3802. Production Techniques for Organizations. (3). Location video and slide/tape equipment, operations and techniques. Emphasis on informational and public relations programming. Not open to Film and Video Production students.

3820. Broadcast Preparation and Performance. (3). Skills required for on-air performance in broadcasting emphasizing use of voice and copy preparation; presentation of public affairs programming, documentary narration, sportscasting, newscasting and combo-announcing.

3821. Radio Production and Studio Operations. (3). (3825). Preparation, production and evaluation of programs, including talk, discussion, interview, music documentary and special event shows; emphasis on construction, editing, and compilation for broadcast use.

3823. Film and Video Production I. (4). Basic production skills and theory; photography; 16mm film, audio and small TV studio. Hands-on production exercises.

3824. Film and Video Production II. (4). Continued production skills and theory in film and video; extensive production exercises. PREREQUISITE: A minimum grade of C in CQMM 3823 or permission of instructor.

3842. Television Studio Production I. (4). Techniques of Studio TV production, including staging and direction of programs. PREREQUISITE: A minium grade of C in 3823 or permission of instructor

3861. Television and Culture. (3). Social, political, and aesthetic dimensions of television in modern culture. **[W]**.

4011-6011. Communication in Organizations. (3). (3011). Study of communication systems and problems in contemporary organizations with emphasis on the role of communication in corporate culture and in organizational change.

4013-6013. Communication in Political Campaigning. (3). (3013). Forms and effects of communication between politicians and constituencies; emphasis on campaign rhetoric via mass media, debates, and model speeches.

4210-19-6210-19. Special Topics In Communication Studies. (1-3). Topics are varied and announced in *Schedule of Classes. May be repeated to a maximum of 9 hours when topic varies.*

4220-29-6220-29. Special Topics in Film. (1-3). Topics are varied and announced in *Schedule of Classes. May be repeated to a maximum of 9 hours when topic varies.*

4341-6341. Interpersonal Communication. (3). Theory and research regarding one-on-one communication; effective practices for various interpersonal settings.

4342-6342. Small Group Communication. (3). Advanced study of group communication theory emphasizing group membership, member perceptions, group development, group process, and group outcomes.

4360-6360. History and Criticism of Public Discourse. (3). Survey and analysis of speeches and speakers vital to social, political, and cultural movement in Western civilization. Ancient to contemporary times. *May be repeated for a maximum of 6 hours.* **[W]**.

4373-6373. Interracial Communication. (3). Special problems encountered in communication among races. Readings, discussion, and field study on how prejudice, stereotypes, and self-concepts can affect communication; exploration of rhetorical methods to minimize these problems.

4374. Directed Studies in Communication Arts. (1-3). Independent research in areas of special interest Includes rhetoric, broadcast and electronic media, and film. PREREQUISITE: permission of instructor.

4375-6375. Intercultural Communication. (3). Special problems encountered in communication between people of different cultural backgrounds. Focus on understanding communicative interaction between and among people with different national/cultural backgrounds and functioning more effectively in multicultural settings. **[W]**.

4380. Communication and Conflict. (3). Theories and methods of conflict management and resolution focusing on practical communication skills. Concepts of perception, listening and peacemaking emphasized.

4381. Rhetoric and Public Controversy. (3). Intensive examination of the presentation of public issues in political and entertainment forms (speeches, drama, television, and film). **[I]**.

4704. Theories of Communication. (3). A review of major theoretical approaches to human communication, ranging from information to systems theory.

4802-6802. Internship. (1-3). Field studies in communication. Supervised practical work with government institution, private business, film company, or broadcast and electronic media firm. Written analysis of experience required. *May be repeated for maximum of 6 semester hours.* PREREQUISITE: permission of instructor. (S/U).

4810-6810. Broadcast Regulation and Program Policy. (3). Effects of FCC and other governmental regulations on broadcast and electronic media management and operations. Topics include licensing, renewals, content control, politics, and copyright. PREREQUISITE: CQMM 3800.

4811-6811. Radio and Television Programming. (3). Analysis of individual program formats (with examples); use of this information along with ratings and other audience research to study design of program schedules. PREREQUISITE: COMM 3800.

4812-6812. Communications Law in the Performing Arts. (3). Artist, performer, management contractual relationships; acquisition, copyright and disposition of literary and audio-visual properties; production and distribution agreements; advertising law and other matters for TV, motion picture, radio and stage businesses.

4822. Audio Production for Film and Video. (3). (3822, 3825). Intermediate principles and practices of audio (recording, editing, mixing, and design) with emphasis on film and video production. PREREQUISITE: A minimum grade of C in 3824 or permission of instructor.

4824-6824. Cinematography/Videography. (3). Art of visual interpretation with strong concentration in theory and techniques of lighting. Experience with professional film and video cameras and lighting equipment. PREREQUISITE: A minimum grade of C in 3824 or permission of instructor.

4825-6825. Editing and Post-Production. (3). Concentrates on the aesthetics of continuity development in a variety of editing styles; editing techniques and post-production procedures for both video tape and double system film. PREREQUISITE: A minimum grade of C in 3824 or permission of instructor.

4831-6831. Broadcast and Cable Sales and Advertising. (3). Relation of broadcasting and cable sales and advertising to networks, station representatives and salespeople; role of sponsors, agencies, and allied groups. PREREQUISITE: CQMM 3800.

4841-6841. Television Workshop. (4). Production of television programming for local cablecasting. *May be repeated for a maximum of 8 semester hours; repetition will not result in a change of any grade previously given.* PREREQUISITE: COMM 3842 or permission of instructor.

4842. Television Studio Production II. (4). (4840). Advanced training in TV studio/multiple camera techniques. Extensive production work. PREREQUISITE: CQMM 3842.

4850-6850. Film History I. (3). (4852). Historical survey of motion pictures from medium's pre-history to 1940. Emphasis on narrative film.

4851-6851. Film History II. (3). Historical survey of the major movements, genres, and themes in narrative film from 1940 to 1960.

4853-6853. Documentary Form in Film. (3). Development of non-fiction film as rhetorical and expressive form. Analysis of individual films, genres, and filmmakers.

4854-6854. Documentary Form in Broadcasting. (3). History, theory, and criticism of non-fiction broadcasting, including docudrama and television documentaries.

4856-6856. Women and Film. (3). Women as performers, viewers, subjects, and creators in American and international cinema.

4857-6857. History of Broadcast and Electronic Media. (3). Comprehensive study of history of broadcast and electronic media in United States as developed from 1895 to present. Use of primary sources. PREREQUISITE: CQMM 3800.

4858-6858. Contemporary Cinema. (3). Major themes and styles in international and American narrative film from 1960 to present. **[W]**.

4871-6871. Broadcast and Cable Management. (3). Theories of management, special problems and situations confronting managers of broadcast and cable outlets, including personnel, engineering operations, programming, and sales functions. PREREQUISITE: CQMM 3800.

4891-6891. Producing and Directing for Film and Video. (3). Research and script preparation; budgeting and production management; working with actors and crew. PREREQUISITE: A minimum grade of C in 3824 or permission of instructor.

4892. Film and Video Production. (1-3). Film and video production workshop. Class members write, produce, direct, or assume crew responsibilities on productions. *May be repeated for a maximum of 6 hours.* See departmental guidelines for independent production requirements and procedures. PREREQUISITES: COMM 3824 and permission of instructor.

4960-6960. Documentary Writing. (3). Writing for non-fiction media.

4970-6970. Screenwriting. (3). Writing for fiction film and television. Basic dramatic theory, narrative structure, characterization, dialogue, adaptation and the unique demands of the audio-visual media.

4980. Honors Studies. (3). (COMM, THCA). Reserved for students enrolled in Communication Arts Honors Program. *May be repeated for a maximum of 15 hours.* PREREQUISITE: Permission of Director of Communication Honors Program.

4982. Honors Seminar. (3). (THCA). Intensive study of particular problems in communication. *May be repeated for a maximum of 12 hours when semester topics vary.* PREREQUISITE: permission of Director of Communication Honors Program.

4993. Senior Practicum. (3). Independent work in radio, video, or film production. Each student has complete creative control of a program from conception through final product. See departmental guidelines for independent production requirements and procedures. PREREQUISITE: permission of instructor. **[I]**.

4999. Senior Honors Thesis. (3). (COMM 4981, THCA 4999). Supervised independent research project. Qpen only to students enrolled in the Communication Honors Program. *May be repeated for a maximum of 6 hours.* PREREQUISITE: permission of Director of Communication Honors Program.

JOURNALISM

PROFESSOR
DAN L. LATTIMORE, *Chair*
Room 300, Meeman Journalism Building

JOURNALISM (JOUR)

1700. Survey of Mass Communication. (3). Social background, scope, functions, and organization of modern communication media, attention to all major mass communication media; philosophy and goals of modern journalism; impact on governmental, social and economic systems.

2121. Media Writing. (3). Basic instruction in journalistic forms and style; use of computer in composition of news reports or articles and in solution of news writing problems; laboratory writing exercises on computer; *one lecture, four laboratory hours per week.* PREREQUISITE: Passing grade on the Journalism Department's Writing Proficiency Exam.

2123. Editing I. (3). Practice in headline writing, editing, and newspaper makeup and study of contemporary editing problems. PREREQUISITE: JOUR 2121.

2520. Press Photography. (3). Taking pictures with news camera, developing film, making enlargements, cropping and scaling for publication. Students may bring their own cameras. Open to non-majors with permission of instructor. *One lecture/four laboratory hours.* PREREQUISITE: ART 2701.

3120. Reporting. (3). (3124, 3720). Gathering news of university community with laboratory writing assignments. PREREQUISITES: JOUR 2121, 2123.

3123. News Feature Writing. (3). Fundamentals of non-fiction feature writing for newspapers, magazines, company publications and broadcast news presentations. Story ideas, personality profiles, humor articles and complex, news-related features developed.

3205. Magazine Article Writing. (3). Free-lance writing techniques; preparation of queries and articles for submission; generation and research of ideas appropriate for magazine market. PREREQUISITE: JOUR 3120 or 3123 or permission of instructor. **[W].**

3300. Survey of Advertising. (3). (2300). Exploration of creative function of advertising; emphasis on role of media.

3322. Advertising Layout and Production. (3). Design and production of printed media with emphasis on the printed advertisement.

3324. Advertising Copy Writing. (3). Principles of advertising psychology in relation to proven techniques for writing effective copy; approximately half of course devoted to practice in writing copy and preparing rough layouts. Typing proficiency required. PREREQUISITE: JOUR 2121 or permission of instructor.

3335. Advertising Sales. (3). Practical experience in preparation and selling of completed advertisements; students will work with own clients throughout semester. PREREQUISITE: JOUR 3322, 3324 or permission of instructor.

3345. Advertising Research. (3). Fundamentals in advertising research: nature of the market, appropriate advertising strategies, message effectiveness and media audiences. Primary and secondary research, sampling, questionnaire design, survey, and data processing and analysis. NQTE: *Must be taken before JOUR 4328.* PREREQUISITE: JOUR 3300. **[C].**

3400. Introduction to Public Relations. (3). Development, scope, and modern role of public relations; emphasis on case studies, lectures, and experimentation with major public relations tools and practices.

3410. Public Relations Research. (3). (4410). Identifying, characterizing and evaluating stakeholder groups and alternative channels of communication. Formal research procedures include sampling, instrument design, information gathering, data processing, analysis and reporting. **[C].**

3421. Public Relations Writing. (3). Emphasis on communication tactics. Plan, write, and produce public relations tools. Audience and media selection. Course covers print and electronic media. *Two lectures, two laboratory hours per week.* PREREQUISITES: JOUR 2121, 3400, 3410. **[W].**

3422. Electronic Media in Public Relations. (3). Planning and writing public relations copy for audiovisual presentations, radio, television, satellite-based communications networks, videotext, teleconferencing, computer-based communications and other electronic delivery systems. PREREQUISITES: JOUR 3400; COMM 3802; JOUR 3421 or permission of instructor.

3526. Digital Imagery in Journalism. (3). Story construction and reinforcement utilizing digital imaging elements including selection, editing, ethics, and story reinforcement in journalism publications including print, desk-top, and electronic media. *Two lecture, two laboratory hours per week.* PREREQUISITE: JOUR 2121.

3625. Radio and Television News Writing and Editing. (3). Processing of news for radio and television; attention to present-day style used by electronic media. *Two lecture, two laboratory hours per week.* PREREQUISITE: JOUR 2121.

3649. Radio News Practicum. (3). Applied skills in producing, writing, reporting, and voicing daily news and information programming for campus radio station WUMR. *One lecture, four laboratory hours per week. May be repeated for a maximum of six credit hours.* PREREQUISITE: JOUR 3625 or permission of instructor. (S/U).

3700. History of Journalism. (3). Origin and development of American journalism; students who enroll should have completed HIST 2601 and 2602 or equivalent.

3712. Information Retrieval and Analysis. (3). Using computers to develop and execute search strategies in multiple on-line databases. Critical analysis, webmastering, and archiving of collected information.

3800. Journalism Seminar. (1). Weekly presentation by media professionals on topics in their fields of journalistic expertise. Students prepare for discussion sessions through assigned readings. *May be repeated for a maximum of 2 hours credit.* PREREQUISITE: junior standing.

3900. Computer Publishing Techniques. (3). Computer design and production of printed materials using desktop publishing software to create simple fliers, brochures and newsletters; *one lecture, four laboratory hours per week.*

4120-6120. Reporting Public Issues. (3). Analyzing and writing news reports about government, courts, energy, economy, taxes, education, environment, medicine and science. Stresses relationship between current issues and public's need to be informed. Emphasis on topics vital to large urban society. PREREQUISITE: JOUR 3120 or 3625. **[W].**

4124-6124. Computer-Assisted Reporting. (3). Advanced use of computer technology and investigative techniques to access, analyze and develop database information in combination with traditional news reporting. PREREQUISITES: News Editorial Students: JOUR 3120; Broadcast News Students: JOUR 3625.

4125. Editing II. (3). (3113, 3125). Practical editing applications using computer for page makeup and design; emphasis on entire editing process combining text and visual material.

4130. Writing Internship. (3). Work in practical assignments at local media under supervision of qualified practitioners. NOTE: *Students who have received credit for JOUR 4330, 4430 or 4630 may not receive credit for JOUR 4130.* PREREQUISITE: permission of department chair. (S/U only).

4214-6214. Magazine Editing and Production. (3). (3214). Editing and production problems of magazines; emphasis on business, industrial, and home periodicals; headline and title writing; pictorial copy layout, staff organization; and production processes. PREREQUISITE: JOUR 3900 or permission of instructor. **[I].**

4327. Media Planning. (3). Procedures for analyzing the advertising situation, writing advertising and media goals, and setting advertising appropriations. Use of a microcomputer program to develop and evaluate optimum advertising media schedules. NOTE: *Offered only in fall term and must be taken before 4328.* PREREQUISITES: JOUR 3300 and MKTG 3010 or 3011.

4328-6328. Strategic Advertising Campaigns. (3). Development of creative strategy and its execution to include layouts, audio tapes, slide shows, storyboards and sales promotion application. NOTE: *Offered only in spring semester.* PREREQUISITES: JOUR 3322, 3324, 3345, 4327. **[W, I].**

4330. Advertising Internship. (3). Work under supervision of qualified practitioners in local advertising agency; advertising department of newspaper, television, or radio station; or company advertising department. NOTE: *Students who have received credit for JOUR 4130, 4430 or 4630 may not receive credit for JOUR 4330.* PREREQUISITE: permission of department chair. (S/U only).

4420. Public Relations Case Problems. (3). (4423). Case studies and typical public relations problems. Planning and preparation of communications materials for various media; application of public relations techniques. PREREQUISITES: JOUR 3421, 3422.

4430. Public Relations Internship. (3). Work experience as intern with public relations department or organization or on team project assigned by instructor. Experience includes analysis of public relations plan and evaluation of results. NOTE: *Students who have received credit for JOUR 4130, 4330 or 4630 may not receive credit for JOUR 4430.* PREREQUISITES: JOUR 4420 and permission of department chair. (S/U only).

4440-6440. Public Relations Campaigns. (3). Application of theory, research data, and problem-solving techniques in the development of comprehensive public relations strategies. PREREQUISITE: JOUR 4420. **[I].**

4629. Electronic Reporting. (3). Gathering and writing of news for all electronic media (radio-TV-cable). Emphasis on fundamentals of reporting and audio-video electronic newsgathering. PREREQUISITES: JOUR 3625; COMM 3821, 3801 QR COMM 3821, 3823, and 3824.

4630. Broadcast News Internship. (3). Work in practical assignments at local broadcast media under supervision of qualified practitioners. NOTE: *Students who have received credit for JOUR 4130, 4330 or 4430 may not receive credit for JOUR 4630.* PREREQUISITE: permission of department chair. (S/U only).

4639. Television Newsroom Production. (3). Producing, writing, editing and using electronic equipment to assemble a television newscast. Emphasis on performing the various tasks in a working newsroom. PREREQUISITE: JOUR 3625, COMM 3801 or permission of instructor.

4649. Television News Practicum. (3). Applied skills in producing, writing, reporting, voicing daily news and information programming for a television newscast. *One lecture, four laboratory hours per week. May be repeated for a maximum of six credit hours.* PREREQUISITES: JOUR 3625, 3649 or permission of instructor. (S/U).

4655-6655. Seminar In Electronic Media. (3). An examination of issues and problems confronting electronic media, analysis of the various professional, societal and economic forces that affect broadcast journalism.

4700. Mass Communication Law. (3). Origin and development of legal principles affecting freedom of expression and provisions of laws of libel, slander, copyright, and other statutes limiting communication in fields of publishing and broadcasting.

4702-6702. Current Issues In Journalism. (3). Advanced study of recent, critical problems faced by mass media and complexities that cause them. **[I].**

4708-6708. Journalism Professional Ethics. (3). Classical approaches to ethics presented with their application to the day-to-day considerations a jour-

nalist must face in working with employers, local publics and the larger society which depends on a free and responsible press.

4712-6712. International Mass Media. (3). Exploration of international communication, flow of news and propaganda; role in national development and international affairs; growth and impact of global journalism, television, advertising and public relations; comparison of media systems.

4800-09-6800-09. Special Topics in Journalism. (3). Intensive study of a single critical issue or current topic. *May be repeated for a maximum of 6 hours credit.*

4830. Directed Individual Study. (1-3). Independent study and research, or practicum, or project under supervision. *May be repeated for a maximum of 3 hours credit.* PREREQUISITE: permission of instructor.

4900. Desktop Presentation. (3). Using computers to learn processes/software/production design concepts involved in multi-media primarily designed for computer-to-computer communication. Involves digital editing of still images, off-line video editing, animation and production techniques for assembling all into a single CD or video to convey advertising, public relations, or news editorial concepts. PREREQUISITE: JOUR 3900 or permission of instructor.

MUSIC

PROFESSOR
B. GLENN CHANDLER, Ph.D., *Chair*
Room 123B, Music Building
http://www.people.memphis.edu/~music/home.html/

APPLICATION AND AUDITION PROCEDURES: Special application and audition procedures are required. See the description of the music programs in *Colleges and Degree Programs*.

PIANO PROFICIENCY: All undergraduate music majors must take a piano placement evaluation before enrolling in applied music courses. This evaluation will place students in the appropriate piano class (MUSE 1105, 1106, 2107, 2108) to develop skills necessary to pass the Piano Proficiency Examination. All students in the Bachelor of Music (in Music) degree program must pass the Piano Proficiency Examination before the beginning of the senior year. This may be done in either of two ways: (1) by completing MUSE 2108, or (2) by passing, without credit, the Piano Proficiency Examination given once each semester. Piano proficiency requirements vary according to the area of concentration. A verification will be mailed to the student and appropriate officials upon completion of the examination. After successful completion of this examination, music students whose major instrument is not piano may audition for major group or private piano instruction.

COMMERCIAL MUSIC PIANO PROFICIENCY: In lieu of the above piano proficiency, all Bachelor of Music commercial music majors, with the exception of keyboard students and students with a concentration in Music Business or Recording Technology must pass the commercial music piano proficiency examination before their final semester in the program.

PATTERNS OF COURSE OFFERINGS: Patterns of course offerings are indicated in some course descriptions. **(F)** indicates the course is offered during the Fall Semester; **(SP)** indicates Spring. Courses with no indications of offering are offered either every semester or as needed. There is no guarantee that courses will always be offered as indicated. Always check the *Schedule of Classes* for availability.

MUSIC THEORY AND COMPOSITION (MUTC)

Placement in the Music Theory sequence for undergraduates will be determined through examination. NOTE: Courses in Composition and Electronic Music may be repeated for credit but not for the purpose of improving the grade originally earned.

1001. Basic Music Theory. (2). For students who plan to major in music but do not meet minimum standards for MUTC 1008. *Not allowable as credit toward the satisfaction of requirements for the major or minor. Two laboratory hours per week.*

1008. Music Theory I. (3). (1004). Basic notation, scales, intervals, triads, key signatures; analysis and exploration of technical material and written exercises in historical areas of plain chant through late 16th century. COREQUISITE: MUTC 1010. PREREQUISITE: Theory placement exam.

1009. Music Theory II. (3) (1005). Four part structures, all seventh chords, chorale harmonization figured bass realization; analysis and written exercises from historical area of early 17th century through J. S. Bach. COREQUISITE: MUTC 1011. PREREQUISITES: MUTC 1008, 1010.

1010. Aural Theory I. (1) (1004). Beginning ear training; scales, intervals, triads, simple melodic lines and simple two part examples, sightsinging of combination of tonal and modal materials. COREQUISITE: MUTC 1008. PREREQUISITE: Theory placement exam. (S/U only).

1011. Aural Theory II. (1). (1005). Ear training involving triads in sequence, two part examples, modulatory melodies; sightsinging of 17th and 18th century melodic examples. COREQUISITE: MUTC 1009. PREREQUISITES: MUTC 1010, 1008. (S/U only).

2008. Music Theory III. (3). (1006). Continuation of four part structure, part writing and figured bass; expanded harmonic materials from ninth chords through chordal mutation; formal and chordal analysis from Bach through mid-19th century. COREQUISITE: MUTC 2010. PREREQUISITES: MUTC 1009, 1011.

2010. Aural Theory III. (1). (1006). Ear training involving expanded harmonic materials, modulatory melodies, two part examples with modulation; sightsinging of 18th and 19th century melodic examples. COREQUISITE: MUTC 2008. PREREQUISITES: MUTC 1011, 1009. (S/U only).

2501. Composition. (2). Class instruction in free composition; emphasis on smaller forms. *May be repeated for additional credit.* PREREQUISITE: MUTC 1008. NOTE: *Composition taught as applied music. Students receive the equivalent of one half-hour lesson per week. Fee for this instruction is $45.00 per semester.*

2502. Composition. (2). Works for piano, voice, chorus, and small ensembles; study of style and analysis of works from music literature. *May be repeated for additional credit.* PREREQUISITE: MUTC 2501 or permission of instructor. NOTE: *Composition is taught as applied music. Students receive equivalent of one hour lesson per week. Fee for this instruction is $90 per semester.*

2511. Introductory Electronic Music. (2). Basic concepts of contemporary digital electronic music techniques including synthesizer operation, MIDI sequencing, and sampling and music notation by computer. PREREQUISITE: MUTC 2008 or permission of instructor. FEE: $45.

3008. Music Theory IV. (3). (3001). Continuation of late 19th century harmonic structures; introduction of popular music and its notational symbols; introduction and use of 20th century techniques analysis and written examples from 20th century. COREQUISITE: MUTC 3009. PREREQUISITES: MUTC 2008, 2010. **[C]**.

3009. Aural Theory IV. (1). (3001). Ear training involving expanded 19th century harmonic considerations, 20th century chromaticism and pandiatonicism, two part examples from both 19th and 20th centuries; sight-singing emphasizing melodies of 20th century. COREQUISITE: MUTC 3008. PREREQUISITES: MUTC 2010, 2008. (S/U only).

3010. Aural Theory V. (1). (3002). Aural exploration of basic forms, cadences and styles of music; detailed aural analysis of modulatory elements within a piece. **(F)**. PREREQUISITES: MUTC 3008, 3009. (S/U only).

3101. Orchestration. (2). (3002). Basic study of instruments of orchestra and band, terminology and techniques pertaining to that study; practical application by scoring for small and large instrumental combinations **(F)**. PREREQUISITES: MUTC 3008, 3009, or permission of instructor.

3102. Advanced Musical Analysis. (3). (3003). Theoretical analysis of large-scale compositions from Renaissance to present. **(SP)**. PREREQUISITES: MUTC 3008, 3009. **[W]**.

4106. (4101). Compositional Processes of the Twentieth Century. (3). Analysis and imitative writing of major composers of the twentieth century, from Debussy through the present. **(SP—even years).**

4202-6202. Seminar: Music Theory and Analysis. (3). Advanced course in theory, counterpoint, and analysis of literature. Contrapuntal and harmonic techniques. Research; theoretical problems from pedagogical point of view; writing in strict and free styles. Recommended as review course for graduate students. **(F)**. PREREQUISITE: permission of instructor.

4204. Individual Studies in Music Theory and Composition. (1-3). (4201-001). Directed individual study in selected areas of music theory and composition chosen in consultation with instructor. *May be repeated for credit but not for the purpose of changing a grade.*

4205. Sixteenth Century Counterpoint. (2). (4201-002). Study of contrapuntal techniques of the sixteenth century. **(SP—odd years).**

4206. Eighteenth Century Counterpoint. (2). (4201-003). Study of contrapuntal techniques of the eighteenth century. **(F—even years).**

4207. Twentieth Century Counterpoint. (2). (4201-004). Study of contrapuntal techniques of the twentieth century. **(F—odd years).**

4208. Analytical Techniques. (3). (4201-006). Techniques of analysis of styles and structure of music from all periods of history of music. **(SP—odd years).**

4209. Advanced Orchestration. (3). (4201-007). Continuation of MUTC 3101. Orchestration of works from nineteenth and twentieth centuries for full orchestra; study of representative orchestral scores from romantic and contemporary periods. PREREQUISITE: MUTC 3101.

4260-69-6260-69. Special Topics in Theory and Composition. (1-3). Topics are varied and announced in *Schedule of Classes*.

4501-6501. Composition. (4). Composition in varied forms for large and small ensembles and solo instruments; analysis of contemporary works and practical application of techniques. *May be repeated for additional credit.* PREREQUISITE: recommendation of upper division examining committee. NOTE: *Composition taught as applied music. Students receive equivalent of one hour lesson per week. Fee for this instruction is $90.00 per semester.*

4502. Composition for Non-Composition Majors. (3). Class instruction in free composition for students not majoring in composition. Practical experience in idea generation, form, development, and instrumentation. PREREQUISITE: MUTC 3008. NOTE: *Composition taught as applied music. Students receive equivalent of one half-hour lesson per week. Fee for this instruction is $45 per semester.*

4511. Intermediate Electronic Music. (2). Concepts of contemporary digital electronic music techniques including synthesizer operation, MIDI sequencing, and sampling as well as music notation by computer. *The two hours credit earned from this course may be used as composition credit towards the composition concentration.* PREREQUISITE: MUTC 2008 or permission of instructor. FEE: $90.

4512. Advanced Electronic Music. (2). Continuation of MUTC 4511. Emphasis on individual compositional projects. Includes investigation of electronic music possibilities of the internet. PREREQUISITE: MUTC 4511. *May be repeated for credit, but only two hours may be used as composition credit in composition concentration. FEE: $90.*

4599. Senior Composition Recital. (3). Integration course for which students prepare and present a concert of their music and an accompanying descriptive paper. Taught as applied music, individual instruction. PREREQUISITES: a minimum of 4 hours in MUTC 4501; permission of the instructor. **[I]**.

MUSIC HISTORY, LITERATURE, AND APPRECIATION (MUHL)

1101. Music Appreciation. (3). Music of various Western and non-Western cultures and historical periods, including the creative process, the formal elements of music and musical styles, genres, and media. Attendance at some concerts required. NOTE: May not be used to satisfy requirements for degrees in Music. **[G]**.

3301. History of Music to 1700. (3). Development of significant musical styles; attention to individual contribution of major composers. **(F)**. PREREQUISITE: MUTC 2008 or permission of instructor.

3302. History of Music Since 1700. (3). Continuation of MUHL 3301. **(SP)**. PREREQUISITE: MUTC 2008 or permission of instructor. **[W]**.

4001-6001. Piano Repertory. (3). Survey of stringed keyboard repertory from Bach and his contemporaries to the present. Representative works analyzed regarding historical, stylistic, formal and aesthetic features. **(F)**. PREREQUISITE: junior standing in music or permission of instructor.

4002-6002. Song Repertory I. (3). Survey of solo literature from the Italian, British Isles, and German Schools of song.

4003-6003. Song Repertory II. (3). Survey of solo literature from the French, Russian and Slavic, Scandinavian, and American Schools of song.

4005-6005. History and Literature of the Organ. (3). Literature for the organ and its effect on and interaction with organ design.

4006-6006. Classical Guitar Literature I. (3). Study of the basic repertoire from the medieval period through the pre-classical period.

4007-6007. Classical Guitar Literature II. (3). Study of the basic repertoire from the classical period to the present.

4259. Studies in Bibliography. (3). Bibliographic techniques in music history; study and cataloguing of standard reference materials; research practices and ethics. Preparation of the Senior Project prospectus.

4260-69-6260-69. Special Topics in Music History. (1-3). Topics are varied and announced in *Schedule of Classes*.

4401. Medieval Music. (3). (4408-001). Advanced study of music in its historical context from Gregorian Chant through 1400.

4402. Renaissance Music. (3). (4408-002). Advanced study of music in its historical context from 1400 through 1600.

4403. Baroque Music. (3). (4408-003). Advanced study of music in its historical context from 1600 through 1750.

4404. Classical Music. (3). (4408-004). Advanced study of music in its historical context from 1725 through 1810.

4405. Nineteenth Century Music. (3). (4408-005). Advanced study of music in its historical context from 1790 through 1900.

4406. Twentieth Century Music. (3). (4408-006). Advanced study of music in its historical context from 1900 to the present.

4407-6407. The Opera and Music Drama. (3). Survey of opera before Richard Wagner; Wagner's music dramas and operas of his contemporaries; dramatic and musical significance of each phase of development of two forms. PREREQUISITE: MUHL 3301, 3302; or permission of instructor.

4500-6500. String Repertory. (3). Histories, texts, methods, periodicals, orchestral studies, and solo and ensemble literature of the individual string instruments.

4601. Comparative Arts. (3). Cultural activities in their interrelation with each other and with corresponding historic and economic events. Open without prerequisite to non-music majors of junior and senior standing.

4800-6800. World Musical Styles. (3). Musical styles and role of music performance in preliterate and folk societies throughout world. **(SP)**.

4801-6801. American Folk and Popular Music. (3). Folk and popular elements in American music. Role of mass media, especially phonograph record, in utilizing and changing folk music. Historical development and interrelationships of various musical styles ranging from 19th century minstrelsy to roots of rock and roll. Emphasis on southern Anglo-American and Afro-American folk and popular musical styles. **(F)**.

4803. Individual Studies in Music History. (1-3). Directed individual study in selected areas of music history chosen in consultation with instructor. *May be repeated for credit with permission of department chair. May not exceed 6 hours credit.*

4804-6804. Blues. (3). (4802-002). Stylistic development of blues music from its beginnings; its relationships to African-American and American culture and history. **(F).**

4805-6805. History of Rock and Roll. (3). (4802-006). Stylistic origins and development of rock and roll music from its beginnings to the present.

4806-6806. History of Jazz. (3). (4802-007). Stylistic origins and development of jazz; interaction of jazz and Western classical music styles.

4807-6807. Memphis Music. (3). (4802-009). Most distinctive forms of folk and popular music in Memphis in the twentieth century; relationships to history, culture, and social patterns of the city and mid-south region; folk music background; blues, jazz, country music, gospel music, and rock and roll emphasized. **(Sp).**

4999. Senior Project in Music History. (3). Integration course in which knowledge and skills developed in music theory, performance practice studies, and music history are utilized systematically in the preparation of a public presentation of musical and musicological interest and of accompanying decriptive paper. *Taught as applied music, individual instruction.* PREREQUISITE: a minimum of 6 hours in advanced music history courses; permission of the instructor. **[I]**.

SACRED MUSIC (MUSA)

4104-6104. Sacred Music in History and Practice I. (3). Survey of Jewish and Christian sacred music, exploring origins of styles, traditions, and current practices. **(F – alternate years).** PREREQUISITE: MUTC 2008.

4105-6105. Sacred Music in History and Practice II. (3). (SP - alternate years). PREREQUISITE: MUTC 2008.

4106-6106. Children's Choirs in the Church. (3). Organization and development of a children's choir program in the church; rehearsal techniques; literature; vocal development; recruiting; contemporary approaches. **(F)**.

4107-6107. Service Playing for Organists. (3). Playing of hymns and accompaniments, adaptation of piano and orchestra accompaniments, basic improvisation. **(SP – alternate years).** PREREQUISITE: Upper division standing in organ or permission of instructor.

4260-69-6260-69. Special Topics in Sacred Music. (1-3). Topics are varied and announced in *Schedule of Classes*.

4801-6801. Individual Studies in Sacred Music. (1-3). Directed individual study in selected areas of music chosen in consultation with instructor. *May be repeated for credit with permission of department chair. May not exceed 6 hours credit.*

APPLIED MUSIC (MUAP)

Applied music courses are divided into two broad categories: (1) small group or individual lessons in vocal or instrumental performance and (2) musical ensembles.

Small group lessons in vocal or instrumental performance are provided through MAJOR GROUP INSTRUCTION (see the explanation below under MAJOR GROUP INSTRUCTION). Individual lessons in vocal or instrumental performance are offered at LOWER DIVISION and UPPER DIVISION levels (see the explanation below under LOWER DIVISION COURSES and UPPER DIVISION COURSES). Major group or individual lessons in vocal or instrumental performance are given by university faculty who are members of the relevant Applied Music Division.

All students who wish to enroll in small group or individual lessons in vocal or instrumental performance must perform an audition for the members of the appropriate Applied Music Division or for a designate of the appropriate division. Because the number of students who can be accepted is limited, it is advisable that the student audition as early as possible to be assured a place with the requested teacher. Practice facilities are provided without charge, but there are additional fees for the individual lessons (see the explanation below under FEES), and a deposit is required for practice room keys.

Examinations for courses in which the student is to receive credit for small group or individual lessons in vocal or instrumental performance are called Board Exams. For Board Exams, each student performs musical selections and/or technical exercises of a grade of difficulty appropriate to the level of instruction in which the student is enrolled. The board hearing the exam is made up of the members of the appropriate Applied Music Division (for further information, see the explanation below under EXAMINATIONS).

Music majors at The University of Memphis are expected to participate in Music Department ensembles; each degree program has specific or general ensemble requirements (see above under the various degree requirements). Non-music majors enrolled at The University of Memphis as degree-seeking students may enroll and be accepted for applied instruction where staff time is available. If accepted for applied instruction, non-music majors must simultaneously enroll and participate in an ensemble sponsored by the Department of Music.

Any student enrolled at The University of Memphis may audition for applied jazz lessons as space permits. Any student accepted for applied jazz lessons must concurrently participate in an appropriate jazz ensemble or combo. Jazz ensemble assignments are made following the jazz auditions during registration week at the beginning of the semester.

All jazz and studio bass majors must simultaneously be enrolled in classical bass, MUAP 1541 until a level of proficiency equal to entrance into upper division is attained.

All jazz and studio guitar majors must take six semester hours of classical guitar which is the maximum allowable for credit toward the degree. If a student can meet the requirements in less time, and wishes to discontinue classical study, the student may do so with permission of the instructor and consultation with the jazz and studio faculty. In the event a student cannot meet the requirements after six semester hours of study, it is the student's responsibility to pursue classical guitar as an elective or until such time as requirements are met to the satisfaction of the guitar and jazz and studio faculty.

FEES: In addition to the regular student fees, all persons taking applied music will be assessed $45.00 per semester for the half-hour lessons. Students registering for one (1) semester hour credit will receive one half-hour lesson per week. All others will receive one hour lesson per week regardless of credit hours at a fee of $90. The integration courses—Artist Recital, Senior Composition Recital, Senior Project in Music History, and Senior Performance Project—are taught as applied music but do not have a fee.

APPLIED MUSIC COURSES

Instrument	Major Group Instruction (2)	Lower Division (1-4 each)	Upper Division (1-6 each)
Trumpet	1110	1111	4111-6111
Horn	1120	1121	4121-6121
Trombone	1130	1131	4131-6131
Tuba	1140	1141	4141-6141
Cornett	1150	1151	4151-6151
Sackbut	1160	1161	4161-6161
Piano	1310	1311	4311-6311
Harpsichord	—	1321	4321-6321
Organ	—	1331	4331-6331
Percussion	1410	1411	4411-6411
Violin	1510	1511	4511-6511
Baroque Violin	—	1512	4512-6512
Viola	1520	1521	4521-6521
Cello	1530	1531	4531-6531
Bass	1540	1541	4541-6541
Guitar	1550	1551	4551-6551
Harp	1560	1561	4561-6561
Viola da Gamba	1570	1571	4571-6571
Voice	1610	1611	4611-6611
Flute	1710	1711	4711-6711
Oboe	1720	1721	4721-6721
Clarinet	1730	1731	4731-6731
Saxophone	1740	1741	4741-6741
Bassoon	1750	1751	4751-6751
Recorder	1760	1761	4761-6761
Jazz Trumpet	—	1112	4112
Jazz Piano	—	1312	4312
Jazz Percussion	—	1412	4412
Jazz Bass	—	1542	4542
Jazz Guitar	—	1552	4552
Jazz Voice	—	1612	4612

REGISTRATION: Students will register for lessons in the same manner and at the same time as they register for other courses; however, students may not be assigned to a course number until they have auditioned. Auditions are held in the Music Building during the pre-college counseling, advising and registration periods before each semester. Auditions may be scheduled in the Music Office, Room 123, Music Building. Any inquiries concerning credits or course numbers should be directed to the chair of the Department of Music.

CREDITS AND GRADES: Students may register for one or two hours credit per semester and will be assigned to individual lessons, a master class, or a combination of the two, commensurate with their level of performance. Additional credit may be earned at the lower division and upper division level. Students earning more than two credits per semester will be assigned additional practice and will be expected to perform at a higher level than those students registered for fewer credits. Grades are awarded on the same basis and have the same significance as in other subjects.

REPETITION OF COURSES: MUAP courses in individual lessons and major group instruction, small ensembles, and large ensembles may be repeated for credit but not for the purpose of improving the grade originally earned.

EXAMINATIONS: For an examination in applied music, students will prepare and perform for members of the faculty of the Department of Music suitable musical selections and technical exercises of a grade of difficulty appropriate to their standing. Examinations are held in designated rooms on days set aside for this purpose near the end of each semester. Credit for the course will not be awarded to any student who fails to take the examination.

1000. Applied Music Workshop. (.5). This course is required of all music majors for eight semesters. (S/U only).

3999. Junior Recital. (1).

4260-69-6260-69. Special Topics in Applied Music. (1-3). Topics are varied and announced in *Schedule of Classes*.

4799. Conducting Recital. (1).

4801-6801. Individual Studies in Applied Music. (1-3). Directed individual instruction in applied area not listed under MUAP. *May be repeated, not to exceed 6 semester hours credit.* PREREQUISITE: permission of department chair.

4998. Senior Performance Project. (3). Integration course in which knowledge and skills developed in music history, music theory, applied music, and music education courses are utilized systematically in the preparation and presentation of a public musical performance and of an accompanying descriptive paper; one of the compositions presented in the format of a lecture-demonstration. *Taught as applied music, individual instruction.* PREREQUISITE: minimum of 2 hours in upper division applied lessons; permission of the instructor. **[I]**.

4999. Artist Recital. (3). Integration course in which knowledge and skills developed in music history, music theory, and applied music courses are utilized systematically in the preparation and presentation of a public musical performance and of an accompanying descriptive paper. *Taught as applied music, individual instruction.* PREREQUISITE: a minimum of 4 hours upper division lessons; permission of the instructor. **[I]**.

MAJOR GROUP INSTRUCTION: Any student of the university may audition for lessons at the major group level except in organ; organ students must have the ability to play the piano before beginning organ instruction. A student may not receive more than four hours credit in any one area of major group instruction. The fee for major group instruction will be the same as for one half-hour lesson per week: $35.00 per semester.

LOWER DIVISION COURSES: Applied music courses in the lower division include the study normally carried out during the freshman and sophomore years. Piano or instrumental students at this level should have had several years of intensive study prior to university entrance so that they have a secure, reliable, and well-grounded technique on the instrument. Organ students may begin at this level provided that they play the piano well and have reasonable ability in sight-reading. Those who do not meet this requirement will register for MUAP 1310. To be admitted to lower division study a student must first pass a qualifying examination.

Students who fall short of the requirements for admission to the lower-division courses will be advised to register for major group instruction until deficiencies are eliminated. Course numbers will be repeated for each semester of study.

UPPER DIVISION COURSES: Promotion to the upper division does not follow automatically after the completion of four semesters of courses in the lower division but is made only on the recommendation of the upper division examining committee; such a recommendation will be made only if the student's proficiency as a performer bears promise of future artistic and professional qualities as a soloist. It is at this level that the student normally begins preparation for a recital.

JUNIOR RECITAL, ARTIST RECITAL, and SENIOR PERFORMANCE PROJECT: The Junior Recital is required for the Performance Concentration under the Bachelor of Music in Music degree. The Artist Recital is required for the Performance Concentration and the Sacred Music Concentration. The Senior Performance Project is required under the School of Music Concentration. The Artist Recital and the Senior Performance Project are integration courses for which the student must prepare both a public recital and a paper. To register for the Junior Recital and the Senior Performance Project, students must have successfully completed at least two years of credit in upper division lessons in their applied area. To register for the Artist Recital, students must have successfully completed at least four hours of credit in upper division lessons in their applied area. The Junior Recital must be approved by the appropriate applied music faculty through a hearing. Both the musical and the written portions of the Artist Recital and the Senior Performance Project must be approved by the appointed faculty committee through a reading and a hearing. Upon approval, the student may schedule a date for the public performance and make arrangements for the printing of the program. The public performance must be presented no later than two weeks after the date of the hearing.

SMALL, CHAMBER, AND SPECIALIZED ENSEMBLES: Advanced students are encouraged (and for certain degree plans are required) to participate in the following groups. Selection for membership is based on audition; courses may be repeated with the approval of the student's advisor. *Three one-hour meetings per week.*

3101. Brass Ensemble. (1). Practical applications of brass performance techniques for a small chamber ensemble, one performer to a part; survey of brass chamber music. PREREQUISITE: permission of instructor.

3104. Collegium Musicum. (1). Use of early musical instruments and voice in performance of early music; primary sources used in preparation of performances. PREREQUISITE: permission of instructor.

3301. Chamber Music for Pianists. (1). Applied work in piano ensembles, chamber music, and accompanying for woodwinds, brasses, strings, and vocalists.

3401. Percussion Ensemble. (1). Study and performance of selected traditional, contemporary, avant garde and pops percussion literature. Open to students in percussion concentration and others through audition.

3402. Contemporary Chamber Players. (1). Ensemble of mixed and variable instrumentation. Performance of repertoire written since 1900 and little known works of other periods. Primary goal of ensemble: to provide experiences in solving unique performance problems of contemporary music. PREREQUISITE: permission of instructor.

3403. Orff Ensemble. (1). Study and performance of literature written for Orff instruments, including barred percussion, unpitched percussion, and recorder.

3501. Chamber Music for Strings. (1). Study and performance of string chamber music repertory. Coaching sessions weekly with a member of music faculty. Open to music majors and non-majors through audition.

3503. Double Bass Ensemble. (1). Study and performance of works for bass ensemble. Open to music majors and non-majors through audition.

3504. Guitar Ensemble. (1). Study and performance of works for guitar ensemble. Open to majors and non-majors through audition.

3505. Cello Ensemble. (1). Study and performance of works for cello ensemble. Open to music majors and non-majors through audition.

3601. Camerata Singers. (1). Small vocal ensemble of varying sizes and resources specializing in performance of music from Medieval through Baroque periods. Open to music majors and non-music majors through audition.

3602. Opera Workshop. (1-6).

3603. Opera Soloists. (1). Preparation and performance of role in major production of University Opera Theater. Audition required.

3604. Opera Production Laboratory. (1-6).

3701. Woodwind Ensemble. (1). Study and performance of original and transcribed works for varied combinations of woodwind instruments. Audition required.

LARGE MUSICAL ORGANIZATIONS

A minimum of eight semesters of large ensemble is required of music majors. (Exceptions to this policy are pianists concentrating in Performance and guitarists who are required to have a minimum of 6 semesters of large ensemble; Commercial Music majors in Performance who are required to have 8 semesters of the appropriate level jazz ensemble; and Commercial Music majors in Composition/Arranging who are required to have 4 semesters of the appropriate level jazz ensemble. Commercial Music majors concentrating in Music Business or Recording Technology are exempt from this requirement.) Generally, wind and percussion performers are to participate in an instrumental ensemble; string performers are to participate in orchestra; and vocal, keyboard, and guitar performers are to participate in a choral organization unless assigned to a large instrumental ensemble. Transfer students lacking sufficient large ensemble credits may partially fulfill their large ensemble requirement by simultaneously enrolling in a small ensemble with a maximum of 2 credit hours of small ensemble applicable to the total large ensemble requirement. Ensemble assignments are based on audition and may be repeated. Any exception to this general ensemble assignment policy may be made after a review of petitions by the department chair, the appropriate ensemble director, and the applied studio teacher.

2001. University Concert Band. (1). (2001001). Performance of traditional and contemporary wind compositions. Participants chosen from this ensemble for basketball pep-bands. Open to music majors and non-music majors.

2002. Marching Band. (2). Selected ensemble that performs at all home football games and occasional out-of-town games in each season. Rehearsal approximately ten hours weekly. Open to music majors and non-music majors. **[G]**.

2003. Varsity Band. (1). (2001002). Concert performance of traditional and contemporary wind compositions. Participants are chosen from this ensemble for basketball pep-bands and usually have participated in Fall marching band. Open to music majors and non-music majors.

2004. University Gospel Choir. (1). Ensemble open to all students. Music includes contemporary gospel, spirituals, and gospel hymns. Serves as outlet for students interested in developing musical and personal capacities. Open to music majors as elective. *Two class meetings per week.*

3004. University Wind Ensemble. (1). Select ensemble of instrumentalists. Study and performance of outstanding repertory for wind ensembles. Open to music majors and non-music majors through audition.

3005. University Orchestra. (1). Study and performance of major orchestral literature. Additional opportunities for opera, chamber-orchestral and chamber ensemble performance. Audition required.

3006. University Singers. (1). Study and performance of choral works from broad spectrum of choral literature; sacred, secular, accompanied and a cappella. Open to music majors and non-music majors through audition.

3007. Opera Chorus. (1). Choral ensemble for opera productions with exploration of related stage techniques. Extra rehearsals at discretion of conductor. Audition required.

3008. Oratorio Chorus. (1). Study and performance of major works primarily oratorio in nature. Open to music majors, non-music majors and the off-campus community. Audition required.

JAZZ AND STUDIO ENSEMBLES

3012. University Instrumental Jazz Ensemble.(1). (3010-001). Study and performance of varied jazz styles, including repertory from standard big band literature and studio ensembles. Open to music majors and non-majors through audition. *This course will meet large ensemble requirements for Commercial Music majors only.*

3013. University Vocal Jazz Ensemble. (1). (3010-002). Study and performance of varied jazz styles, including repertory from standard big band literature and studio ensembles. Open to music majors and non-majors through audition. *This course will meet large ensemble requirements for Commercial Music majors only.*

3014. Recording Studio Instrumental Ensemble. (1). (3011-001). Ensemble performs and records works written by students in the Commercial Music program. *This couse will meet large ensemble requirements for Commercial Music majors only.*

3015. Recording Studio Vocal Ensemble. (1). (3011-002). Ensemble performs and records works written by students in the Commercial Music program. *This couse will meet large ensemble requirements for Commercial Music majors only.*

3103. Jazz Combo. (1). Practical application of basic jazz improvisatory skills; combo experiences in all jazz styles; traditional, bop, contemporary. Audition required.

MUSIC EDUCATION (MUSE)

FIELDS OF ENDORSEMENT FOR TEACHING: For students in the School Music Concentration of the Bachelor of Music in Music degree, endorsement may be obtained in Instrumental Music and in Vocal Music. Normally, a student can expect to be recommended in only one of these areas. Vocal Music applicants should be able to play piano accompaniments of moderate difficulty, should possess an adequate solo voice for school music purposes, and should schedule a variety of large choral ensembles. Instrumental Music applicants should study one instrument of major emphasis and participate in large instrumental ensembles. Students in either area may satisfactorily meet piano and voice requirements with completion of MUSE 2108 and MUSE 1113 and their prerequisites. A graduation recital is required in both areas.

1100. Class Piano for Non-Music Majors. (2). Beginning instruction in piano for non-music majors. Development of basic reading and performance skills.

1101. Class Instruction in Brass Instruments. (1). Basic performance skills and teaching techniques on trumpet, trombone, French horn, baritone horn and tuba for those who intend to teach instrumental music in schools. **(SP)**.

1103. Class Instruction in Percussion Methods. (1). Basic performance skills and teaching techniques on snare drum, timpani, and keyboard percussion instruments for those who intend to teach instrumental music in schools. **(F)**.

1104. Class Instruction in Woodwind Instruments. (1). Basic performance skills and teaching techniques on clarinet, flute, saxophone, oboe, and bassoon for those who intend to teach instrumental music in schools. **(SP)**.

1105. Class Instruction in Piano. (2). Basic technique, with emphasis on sight-reading. PREREQUISITE: MUTC 1001 or permission of instructor

1106. Class Instruction in Piano. (2). Playing of songs used in school music teaching; community songs, and hymns. PREREQUISITES: MUSE 1105; MUTC 1008, 1010

1112. Class Instruction in Voice. (1). Fundamentals of vocal production useful for all music teachers.

1116. Class Instruction in Stringed Instruments. (1). Basic performance skills on violin, viola, cello, or double bass. Emphasis on principles of sound production, intonation, and bow strokes. Various published methods examined and compared. Orchestral and chamber music literature for string players. **(F)**.

1118. Class Instruction in Guitar for Non-music Majors. (2). Beginning instruction in classical guitar for non-music majors. Development of basic reading and performance skills.

2107. Class Instruction in Piano. (2) (1107). Simpler Bach chorales, more difficult songs, and accompaniments, appropriate to the student's major field; memorization optional. PREREQUISITES: MUSE 1106; MUTC 1009, 1011.

2108. Independent Studies in Piano Proficiency. (2). Piano repertoire and technique, accompaniments, harmonization, transposition, and sight reading to satisfy the core requirements of the piano proficiency exam. Requirements vary according to the student's concentration area and the degree emphasis. PREREQUISITES: MUSE 2107; MUTC 1009, 1011. (T grade allowed.)

3700. Basic Conducting. (2). Development of conducting skills. Basic baton principles, rhythmic analysis, expressive techniques, phrasing, and multimetered problems. Class meetings require performing as instrumentalist or vocalist as well as conductor. *Three class hours per week.* **(F)**. PREREQUISITE: Completion of MUTC 3008.

3702. Score Reading. (3). Realization of open score at the keyboard; vocal scores, small orchestra and large orchestra scores; clefs, transpositions, etc.; employing literature from various periods of music history.

4001-6001. Orff-Schulwerk for Classroom Teachers. (3). Broad, practical introduction to use of Orff-Schulwerk approach to elementary music teaching. Development of performance leadership skills emphasized. Not open to music majors.

4201-6201. Individual Studies in Music Education. (1-3). Individual study of problems and opportunities faced by person who teaches music in schools; for classroom teachers, music teachers, supervisors, principals, and administrators. *May be repeated, but not for the purpose of changing a previous grade, for maximum of 6 semester hours credit.*

4205-6205. Marching Band Techniques. (2). Organizing and conducting the marching band, gridiron charting and marching procedures with a study of precision drill, formations and pageantry. (SP). PREREQUISITE: permission of the instructor.

4208-6208. Band Literature. (3). History and evolution of wind instruments and wind instrument playing and the history and development of the wind band and its literature, with general background material on the specific composers involved. **(SP)**.

4209. Piano Tuning and Repair. (2). Concentrated study of basic techniques involved in piano tuning and adjustment. Some basic tools required.

4211. Vocal Diction I. (2). Phonetic study of Latin, English and German languages in detail. Introduction and basic rules of Italian pronunciation. Study includes International Phonetic Alphabet transcription of songs and arias and class performance. *(Alternate years).*

4212. Vocal Diction II. (2). Phonetic study of Italian, French, and Spanish in detail, including IPA transcription of songs and arias and class performance. Other languages (Russian, Hebrew, etc.) may be covered as time permits. *(Alternate years).*

4213. Materials and Methods of General Music. (2). (4203). Philosophy, methods and materials for teaching non-performance music classes in secondary schools, grade 7-12. Includes demonstration and simulation of classroom teaching at this level. **(F)** COREQUISITE: MUSE 4214.

4214. Clinical Experience in Materials and Methods of General Music. (1). (4204). Observation and teaching of mini-lessons for teaching non-performance music classes in secondary schools, grade 7-12. **(F)** COREQUISITE: MUSE 4213.

4260-69-6260-69. Special Topics in Music Education. (1-3). Topics are varied and announced in *Schedule of Classes*

4303. Materials and Methods of Instrumental Music, K-8. (2). Designed to prepare the school instrumental music teachers to teach basic music concepts to beginners in mixed instrumental group settings. Instruction methodologies and materials, simple instrumental arranging, instrument assignment, and instrument maintenance stressed. **(SP)** PREREQUISITE: Junior standing in music. COREQUISITE: MUSE 4304

4304. Clinical Experience in Materials and Methods of Instrumental Music, K-8. (1). Observation and teaching of mini-lessons in music to beginners in a mixed instrumental group settings. **(SP).** PREREQUISITE: Junior standing in music. COREQUISITE: MUSE 4303.

4305. Materials and Methods of Choral Music, K-6. (2). Aims and principles of music and of traditional and contemporary methods of teaching in elementary schools. Creative approach to rhythm, listening, instrumental and singing activities. Contemporary systems of music teaching for elementary grades surveyed. **(SP)**. PREREQUISITE: Junior standing. COREQUISITE: MUSE 4306.

4306. Clinical Experience in Materials and Methods of Choral Music, K-6. (1). Observation and teaching of mini-lessons in music in an elementary school setting. **(SP)**. PREREQUISITE: Junior standing in music. COREQUISITE: MUSE 4305.

4403. Materials and Methods of Instrumental Music, 9-12. (2). Designed to prepare the instrumental music teacher to teach music concepts to intermediate and advanced players in mixed instrumental group settings. Instruction methodologies and materials, objectives, evaluation, motivation, and administration stressed. **(F).** PREREQUISITE: Junior standing in music. COREQUISITE: MUSE 4404.

4404. Clinical Experience in Materials and Methods of Instrumental Music, 9-12. (1). Observation and teaching of mini-lessons in music to intermediate and advanced player in mixed instrumental group settings. **(F)**. PREREQUISITE: Junior standing in music. COREQUISITE: MUSE 4403.

4405. Materials and Methods of Choral Music, 7-12. (2). Selected materials and methods of practical concern to the vocal-choral music specialist. Consideration of music series, scheduling techniques, voice class development, choral publishers, units of study. **(F)**. PREREQUISITE: Junior standing in music. COREQUISITE: MUSE 4406.

4406. Clinical Experience in Materials and Methods of Choral Music, 7-12. (1). Observation and teaching of mini-lessons in music in a secondary school setting. **(F)**. PREREQUISITE: Junior standing in music. COREQUISITE: MUSE 4405.

4501-6501. Piano Pedagogy I. (3). Training teachers for beginning through intermediate level piano instruction. Establishing strong artistic, musical and technical foundations. **(F)** PREREQUISITE: permission of instructor.

4503-6503. Piano Pedagogy II. (3). Training teachers for advanced piano instruction. Extensive readings from renowned artist-teachers and performers. Development of ideation and memorization skills. Observations and supervised practice teaching **(SP)**. PREREQUISITE: MUSE 4501 or permission of instructor.

4505-6505. Principles of Accompanying. (3). Performance class involving practical study of instrumental and vocal standard repertory and the problems of ensemble playing. Facility in sight-reading and ability to assimilate music rapidly. Score-reading, transposition, and figured bass realization introduced as skills necessary to well rounded musicianship. **(SP)**. PREREQUISITE: permission of instructor.

4506. Introduction to Suzuki Talent Education for Strings. (3). Required of students who plan to serve as apprentice string teachers in U of M Suzuki Talent Education program. Basic instruction in Suzuki philosophy; participation with parents and children in Suzuki string classes.

4508-6508. Principles of Suzuki Piano. (3). Suzuki philosophy applied to development of the child's abilities and role of teacher and parent. Students will analyze technical and musical instruction of beginning piano student. **(F)** PREREQUISITE: upper division piano skills.

4509. Suzuki Violin Literature and Techniques. (3). Literature and technique taught in Suzuki Violin School; fundamental technique, development of posture, tone and listening ability in beginning students; analysis of pedagogical material. Required of students who plan to serve as apprentice teachers in U of M Suzuki String Program. PREREQUISITE: MUSE 4506.

4510. Advanced Suzuki String Pedagogy. (3). Literature and technique taught in Suzuki Violin School; emphasis on development of advanced student; laboratory experience in U of M Suzuki String Program. Required of students planning to be apprentice teachers in U of M Suzuki String Program. PREREQUISITE: MUSE 4509.

4511-6511. Class Piano Pedagogy. (3). Group instruction techniques in teaching of beginning, intermediate, and early advanced piano. Emphasizes observation and practical application. For the piano major and/or prospective piano teacher. **(SP)**. PREREQUISITE: upper division level in keyboard or permission of instructor.

4512-6512. Jazz Pedagogy for Music Educators. (3). Design and implementation of a comprehensive jazz curriculum, either at secondary or college level; teaching methodology in all disciplines of the jazz idiom. PREREQUISITES: advanced standing, permission of instructor.

4700. Instrumental Conducting. (2). (3701). Various problems encountered in preparation and conducting of instrumental scores; individual practice with opportunity for each student to conduct instrumental groups. *Three class hours per week.* PREREQUISITE: MUSE 3700.

4701. Choral Conducting. (2). Various problems encountered in preparing and conducting traditional and contemporary vocal scores; rehearsal techniques; individual practice with laboratory groups. *Three class hours per week.* PREREQUISITE: MUSE 3700.

4801-6801. Teaching Music Comprehensively. (3). Methods course to bring music theory, history, literature, performance, composition, and analysis to bear on teaching of music at any level—elementary, junior high, high school, college, and private studio.

4802-6802. Level I Orff-Schulwerk. (1-3). Basic Orff-Schulwerk techniques including body movement, soprano recorder, percussion, vocal performance, improvisation and arranging. PREREQUISITE: junior standing in music education or equivalent experience.

COMMERCIAL MUSIC (CMUS)

http://www.people.memphis.edu/~cmusweb/

1116. Class Instruction in Piano: Jazz/Pop/Commercial. (2). Basic harmonic patterns, chord symbol realization, voicing, basic rhythmic patterns. PREREQUISITE: MUSE 1105 or equivalency exam.

2101. Music Theory: Jazz/Pop/Commercial I. (3). Basic harmonic structures, chord symbol realization, melodic structures, notation, articulation, rhythmic patterns; analysis of written and recorded jazz and pop music; transcription of recorded materials. *Three lecture, one lab hours per week.* **(F)**. PREREQUISITES: MUTC 1009, CMUS 1116

2102. Music Theory: Jazz/Pop/Commercial II. (3). Altered scales and modes, altered and extended chords, chromatic progressions, mediant relationships, poly-harmony and panchromaticism. *Three lecture, one lab hours per week.* **(SP)** PREREQUISITE: CMUS 2101.

2501. Composition/Arranging: Jazz/Commercial I. (2). Emphasis on small instrumental and vocal works, basic style and form. *May be repeated for a maximum of 6 hours credit.* PREREQUISITE: MUTC 2501 or permission of instructor. NOTE: *Composition is taught as applied music. Students receive the equivalent of one half-hour lesson per week. Fee for this instruction is $30.00 per semester.*

2502. Composition/Arranging: Jazz/Commercial II. (2). Emphasis on stage and jazz band arranging techniques. *May be repeated for a maximum of 6 hours credit.* PREREQUISITE: CMUS 2501 or permission of instructor. NOTE: *Composition is taught as applied music. Students receive the equivalent of one half-hour lesson per week. Fee for this instruction is $30.00 per semester.*

3100. Artist Management. (3). Problems involved in developing and managing career of contemporary recording artist. Attention to management agreements, personal appearance contracts, promotion, booking and agentry, marketing, artist representation, public relations, merchandising and media production activity. A portfolio will be completed.

3101. Music Media: Promotion, Sales, Distribution and Merchandising. (3). Current practices in exposing recording and other music media to public including business elements of music media distribution. Emphasis on promotion and sale of recordings, radio station music formats, traditional and electronic methods of media delivery, and music merchandising. Overview of manufacturing and duplication issues.

3103. Contemporary Songwriting and Production Techniques. (3). Process of developing an idea into a commercially viable song and applying production techniques for maximum commercial potential. PREREQUISITES: CMUS 1116, 2101 or permission of instructor.

3501. Composition/Arranging: Jazz/Commercial III. (2). Individual instruction for mixed ensembles and studio groups in various jazz and studio styles, standard and extended forms. Introduction to line writing. *May be repeated for additional credit.* PREREQUISITE: CMUS 2502 or permission of instructor. NOTE: *Composition is taught as applied music. Students receive the equivalent of one hour lesson per week. Fee for this instruction is $60.00 per semester.*

3800. Recording Studio Technology. (4). Detailed examination of basic theory, operational concepts and technologies upon which modern audio production is based. Exploration of creative production techniques used to enhance music recordings. PREREQUISITES: sophomore standing, completion of MATH 1312, TECH 1811, and permission of instructor.

3801. Computer-Based Audio Production. (2). Focus on needs of practicing audio engineer. Concepts and practices of using equipment commonly found in electronic music studios with emphasis on digital audio workstation. Topics include: sampling, synthesis, MIDI, patching, editing, synchronization, signal processing and creative commercial production techniques. PREREQUISITES: computer literacy, CMUS 3800 and permission of instructor. NOTE: *Basic computer operations will* ***not*** *be covered. Students must be proficient with Macintosh or Windows environment including, basic system operations, data*

backup functions, file manipulation, data translation and common application programs.

3802. Audio Production: Technology and Practice. (3). Promote basic understanding of equipment, techniques, musical production values and technology commonly used in modern audio production. Designed to give music business major an understanding of production process or to enhance studio musician's ability to provide creative services during recording sessions. PREREQUISITES: sophomore standing and permission of instructor.

3825. Materials and Techniques of Improvisation I. (3). Development of improvisation skills on solo instruments or voice; basic chord patterns, scales, arpeggios; performance with rhythm section. **(F)**. PREREQUISITE: CMUS 2102 or permission of instructor.

3826. Materials and Techniques of Improvisation II. (3). Analysis of melodic structures; motivic fragmentation and sequencing; extended harmonic structures, performance in small combo settings. **(F)**. PREREQUISITE: CMUS 3825 or permission of instructor.

3827. Materials and Techniques of Improvisation III. (3). Analysis and performance of music in standard styles, including bebop, Latin, fusion, and jazz/rock; contemporary mainstream, pan-chromatic, and free-form improvisation; performance with combos and large jazz ensembles. **(F)**. PREREQUISITE: CMUS 3826 or permission of instructor.

3828. Aesthetics and Analysis of Jazz and Commercial Music Styles. (2). Fundamentals of form and style analysis; study of the artistic and commercial intentions and appropriateness of music from early popular styles to the present. **(SP)**. PREREQUISITE: CMUS 2102 or permission of instructor.

4102-6102. Composer's Workshop: Jazz/Commercial. (3). (MUTC 4102). Composition/Arranging for various sizes of instrumental and vocal groups with emphasis on commercial writing; projects in record copies, horn and string tracks, background vocals, instrumental accompaniment for vocal solos, jingles, and radio station ID's. **(SP-odd years)**. PREREQUISITES: CMUS 2102, 2502, or permission of instructor.

4103-6103. Jazz and Studio Ensemble Techniques. (3). (MUTC 4103). Jazz and studio performance styles and practices, emphasizing ensemble rehearsal and conducting techniques, articulation, phrasing, balance and blend, line dominance, and recording studio performance skills. **(F)**. PREREQUISITE: CMUS 3828.

4201. Studies in Commercial Music. (1-3). Class or supervised individual study of special problems in Commercial Music. *May be repeated if course content differs.*

4260-69-6260-69. Special Topics in Commercial Music. (1-3). Topics are varied and announced in *Schedule of Classes.*

4501. Composition/Arranging: Jazz/Commercial IV. (3). Individual instruction with emphasis on advanced line writing, fusion and contemporary mainstream styles, writing for full studio orchestra. *May be repeated for additional credit.* PREREQUISITE: CMUS 3501 or permission of instructor. NOTE: *Composition is taught as applied music. Students receive the equivalent of one hour lesson per week. Fee for this instruction is $60.00 per semester.*

4502-6502. Introduction to Film/Video Scoring. (3). Basic problems of writing music for film and video: commercial and industrial productions, shorts and full length features, selection of appropriate styles, creating a master music list, writing from a cue sheet; introduction to editing room equipment: conversion of film frames to video, use of SMPTE time code and synchronization equipment, MIDI sequencer scoring from a digital audio workstation; project assignments in film and video formats. (alternate years). PREREQUISITES: MUTC 2511, CMUS 3501, and either CMUS 3801 or MUTC 4511 or 4505, or by permission of instructor.

4503. Concert Promotion, Tour Management and Artist Relations. (3). Current practices in tour promotion, tour management and artist relations from perspectives of promoter, artist, road manager and venue administrator.

4504. Entertainment Complex Administration. (3). Fundamentals for managers of concert halls, theme parks, stadiums, nightclubs, and other venues. Topics include talent selection and contract negotiations, union considerations, publicity, security, cash management, budgets, selection of program material, presenting programs and performances. **(S/P)**.

4602-6602. Music Industry Business Practice and Structure. (3). (MUHL 4602). Examination of organization, structure and business relationships upon which commercial music industry operates. Topics include: industry structure, fundamental music business processes and activities, music as property, uses of music media, career options.

4603-6603. Copyright and Licensing. (3). (MUHL 4603). Detailed examination of intellectual property rights as they relate to commercial music industry. PREREQUISITE: CMUS 4602.

4800. Studio Recording. (4). Audio engineering on modern multi-channel recording equipment using commercial production techniques. Emphasis on skills of console operation, microphone selection and placement, session set-up, preparing musical instruments for recording, editing, mixing and engineer's artistic involvement in project. **(SP)**. PREREQUISITES: TECH 1811; CMUS 3800, and permission of instructor.

4801. Problems in Commercial Music. (1-3). Supervised independent study. *May be repeated to maximum of nine hours, but not for purpose of changing grade originally given.* PREREQUISITE: permission of instructor.

4802. Advanced Recording. (4). Advanced instruction in producing contemporary commercial recordings. Emphasis on application of production practice to recording assignments. Advanced study of session technique, signal processing, mixing, editing, automation, synchronization, equipment and digital recording. PREREQUISITES: CMUS 3801, 4800 and permission of instructor.

4803. Advanced Media Production and Technologies. (4). Comprehensive application of production techniques in audio recording, audio/video production and multimedia production. Emphasis on artistic sensitivity, musicality and aural imagery. PREREQUISITES: CMUS 4802 and permission of instructor. PREREQUISITE or COREQUISITE: CQMM 4825. Completion of JQUR 3900 and 4900 preferred.

4804. Recording Studio Administration. (3). Managerial and financial aspects of operating a recording services business. Facility design, scheduling, expansion, rate determination, billing, hiring, securing venture capital and risk management. PREREQUISITES: CMUS 3800 or 3802, junior standing and permission of instructor.

4806. Fundamentals of Concert Sound Reinforcement. (3). Basic equipment and production techniques for providing live sound services. Methods for handling various sized groups in diverse locations. PREREQUISITES: CMUS 4800 and permission of instructor.

4810. Audio Production Practicum. (1-3). Supervised audio production activities. *May be repeated up to nine hours credit but not for the purposes of changing the grade originally earned.* PREREQUISITES: CMUS 4800 and permission of instructor.

4811. Studio Maintenance Practicum. (1-3). Troubleshooting and maintenance activities under the supervision of studio staff. *A minimum of 42 clock hours of service for each credit hour is required. May be repeated up to nine hours credit, but not for the purpose of changing the grade originally earned.* PREREQUISITES: CMUS 4800 and permission of instructor.

4812. Concert Sound Practicum. (1-3). Diverse live sound reinforcement activities. *A minimum of 42 clock hours of service for each credit hour is required. May be repeated up to nine hours credit, but not for the purpose of changing the grade originally earned.* PREREQUISITE: CMUS 4800, 4806 and permission of instructor.

4895. Senior Project: Jazz and Studio Performance. (3). (4897001). Project must include live and recorded performances demonstrating the student's mastery of various styles of jazz and popular music performance. PREREQUISITES: upper division standing in applied music, CMUS 3827 or permission of instructor.

4896. Senior Project: Jazz and Studio Composition/Arranging. (4) (4897002). Project must include original compositions and original arrangements of existing compositions in a variety of styles. Project should include live performance, recorded album tracks, and film music. PREREQUISITES: CMUS 4501, 4502 or permission of instructor.

4898. Senior Project in Music Business or Recording Technology. (4). Comprehensive final project which demonstrates mastery of creative, technical, and business elements of commercial music industry. Intended to be taken during the student's last semester before graduation. PREREQUISITES: senior standing and permission of instructor. **[I]**.

4899. Internship. (1-3). One semester of supervised field work experience in selected areas of the commercial music industry. *A minimum of 42 clock hours of service for each credit hour is required. May be repeated up to nine hours credit, but not for the purpose of changing the grade originally earned.* PREREQUISITE: placement interview and permission of instructor.

THEATRE AND DANCE

PROFESSOR
JOHN J. McFADDEN, JR., *Chair*
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The Department of Theatre and Dance offers a B.F.A. degree in Theatre with concentrations in Performance, Design and Technical Production, and Dance. The University of Memphis is an accredited institutional member of the National Association of Schools of Theatre.

NOTE: In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000- and 4000-level courses in the Department of Theatre and Dance.

THEATER (THEA)

1411. Basic Oral Interpretation. (3). Introduction to interpretation of literature in performance. To develop and heighten performer's responsiveness to the literary text.

1551. Introduction to Theatre. (3). Experiential, conceptual, historical, and cultural study of theatre as a unique form of artistic expression and mirror of human experiences and values throughout the world. Survey of constituent elements of a theatrical work and its major forms of expression. *Attendance at The University of Memphis Theatre productions required.* **[G]**.

1561. Introduction to Design. (3). Historical and conceptual survey of basic elements of production—scenery, costumes, lighting, sound—and their relation to theatrical production process.

2501. Stage Movement. (3). Introduction to movement as basic element of actor's craft. Focus on recognition, development, and understanding of natural physical actions and rhythms and their application to stage. **[G]**.

2511. Theatre Crafts. (3). Lecture/laboratory covering all phases of craft skills and equipment involved in technical theatre production. *Required lab work.*

2512. Introduction to Theatre Graphics. (3). Introduction to graphic communication processes of technical theatre. Mechanical drafting and CAD for scenery, properties, sound and lighting design; poster and program graphics. *(Offered alternate years).*

2515. Stage Make-up. (3). Lecture/laboratory class in which fundamentals of theatrical make-up are studied through a series of make-up projects including corrective make-up, fantasy, mask and beard makeups. *(Offered alternate years).*

2530. Acting for Non-Majors. (3). Introduction to craft of acting. Development of actor's individual potential through basic technique. Performance of short scenes in class.

2531. Basic Acting Techniques. (4). First essential of acting study: exploration of the actor. Class exercises to develop relaxation, concentration, imagination, and improvisation skills.

2532. Character Development. (4). Principles of role analysis through study of subtext, character motivation, and objectives. PREREQUISITE: THEA 2531 or permission of instructor.

3212. Voice Production for the Performer. (4). Techniques for freeing the vocal mechanism: breathing, phonation, movement to enhance the performer's craft.

3213. Voice Articulation for the Performer. (3). International Phonetic Alphabet. Standard American Dialect. Exercises in articulation and dialects as techniques for conveying dramatic intention and character. *May be taken to improve grade in COMM 1211.*

3412. Directing Experiments. (3). Theatrical image; creative exercises in imaginative use of space, time, and materials as they relate to stage direction and design. *(Offered alternate years).*

3505. Mime. (3). Techniques, composition and exploration of various styles of mime. PREREQUISITE: THEA 2501 or permission of instructor.

3506. Movement Styles. (3). Techniques and choreography of the movement styles of various periods, with study in such areas as stage combat and masks. PREREQUISITE: THEA 3505 or permission of instructor.

3511. Stagecraft. (3). Lecture/laboratory includes theatre terminology, theatre forms, production organization, job descriptions, and safety. Scenery construction to include painting, flat scenery, three-dimensional scenery, and introduction to steel materials. Required lab work. *(Offered alternate years).* PREREQUISITE: THEA 2511.

3531. Scene Study. (4). Development of ensemble work within scenes. *May be repeated for a maximum of 8 hours with permission of instructor.* PREREQUISITE: THEA 2532.

3532. Advanced Scene Study. (4). Continuation of 3531. Attention to material from modern classics. *May be repeated for a maximum of 8 hours with permission of instructor.* PREREQUISITE: THEA 3531.

3551. Audition Preparation Performance Laboratory. (1). (3541-005). Weekly meeting to review/critique actors' audition choices and progress. PREREQUISITE: permission of instructor.

3561. Principles of Scene Design. (3). Application of principles to various theatrical conventions and configurations. *(Offered alternate years).*

3562. Principles of Costume Design. (3). Techniques of costume design with special attention to character interpretation and design visualization. Open to non-majors with permission of instructor. *Offered alternate years.*

NOTE: THEA 3601, 3602, 3603, 3604, 3605, 3606, 3607, and 3608 include preparation for and participation in departmental theatre productions. Individualized work is in the form of supervised laboratory situations. Running crews for season productions selected from participating labs. *Each course may be repeated for a maximum of 3 hours with permission of the instructor.*

3601. Management and Publicity Production Laboratory. (1). (3542-001).

3602. Costumes Production Laboratory. (1). (3542-002).

3603. Lighting Production Laboratory. (1). (3542-003).

3604. Sound Production Laboratory. (1). (3542-004).

3605. Scenery Production Laboratory. (1). (3542-005).

3606. Props Production Laboratory. (1). (3542-006).

3607. Make-up Production Laboratory. (1). (3542-007).

3608. Dance Production Laboratory. (1).

4210-19-6210-19. Special Topics in Theatre. (1-3). Topics are varied and announced in *Schedule of Classes. May be repeated to a maximum of 9 hours when topic varies.*

4401-6401. Children's Literature in Performance. (3). Adaptation of Children's literature for performances in theatrical and educational settings. Includes styles of literature, principles of performance and production of material designed for young audiences. *May be repeated for up to 6 hours credit with permission of instructor.*

4441-6441. Performance Repertory. (3). Group performance in dramatic and narrative theatre styles as well as dance and theatre movement. *May be repeated for a maximum of 9 hours.* PREREQUISITE: Prospective students must audition for and be cast in the Memphis Moving Line Company.

4455. Directing Narrative Theatre. (3). Directing techniques for staging literary texts not originally written for the theatre. Includes script adaptation of short stories, poetry, and non-fiction prose. Directing projects required. *(Offered alternate years).* PREREQUISITE: THEA 4521 or permission of instructor.

4457-6457. Interpretive Styles. (3). Exploration of performance style as it evolves from language, structure, and style of the literary text. Materials for performance will vary each semester and may alternate among the genres of prose fiction, poetry, and period drama. *Repeatable for a maximum of 9 hours when content varies.* PREREQUISITE: permission of instructor.

4501-6501. Advanced Movement Styles. (3). Advanced study in physical theatre styles. Varied semester topics: mask performance; fighting styles for period weapons; and physical theatre techniques for directors, teachers, and choreographers. *Repeatable for a maximum of 6 hours when content varies.* PREREQUISITE: permission of instructor.

4503-6503. Creative Dramatics. (3). Basic techniques and theories for use of dramatization in elementary and secondary education. Includes sociodrama, dramatization of school subjects and daily concerns, and improvisation and creation of dramatic plays.

4514. Theatrical Rendering Techniques. (3). Materials and techniques for rendering theatrical space and scenic, costume, lighting, and properties design elements.

4515-6515. Scene Painting. (3). Lecture/laboratory covering techniques of painting scenery for stage. *(Offered alternate years).* PREREQUISITE: THEA 3561.

4516-6516. Technical Direction. (3). Lecture/laboratory for theatre technicians includes production organization and safety, engineering, rigging, materials control and supply ordering. *(Offered alternate years).* PREREQUISITE: THEA 3511 .

4521. Principles of Stage Direction. (3). Exploration of conceptual, planning and implementation skills of stage director from script interpretation to rehearsal and performance. Attention to both traditional and non-traditional theatrical modes. Directing projects required. *(Offered alternate years).* PREREQUISITE: THEA 3412 or permission of instructor.

4531-6531. Acting Styles. (4). Development of acting styles as influenced by environments of historical periods. *May be repeated for maximum of 8 hours. (Offered alternate years).* PREREQUISITE: THEA 3532.

4532-6532. Advanced Acting Styles. (4). Continued work in acting styles. *May be repeated for maximum of 8 hours. (Offered alternate years).* PREREQUISITE: THEA 4531.

4541. Internship. (1-6). Supervised work in actual university, community, or professional theatre productions on internship basis. Credit varies with amount of time and responsibility involved. *May be repeated for a maximum of 12 semester hours.* PREREQUISITE: permission of Director of Theatre.

4551-6551. Theatre History—Classic. (3). Shaping forces and theatrical forms from primitive civilizations to the Renaissance in both Western and non-Western cultures, with emphasis on the former. *(Offered altemate years).*

4552-6552. Theatre History—Modern. (3). Continuation of 4551 to present. *Offered alternate years.*

4553. Directed Individual Studies in Theatre. (1-3). For advanced student who wishes to do concentrated study in specific area of theatre. *May be repeated for maximum of 9 hours.* PREREQUISITE: permission of instructor.

4554-6554. Visual History for Theatrical Design. (3). Design aesthetics of selected historical periods as applied to theatrical design. *May be repeated for a maximum of 6 hours.*

4555-6555. Technical Production Studio: Theatre Technology. (3). Lecture/laboratory using traditional and contemporary materials and scenic techniques including rigging, metals and welding, wood working, and plastics. PREREQUISITE: THEA 3511 or permission of instructor.

4556-6556. Technical Production Studio: Lighting. (3). Study of technical principles that support areas of theatrical lighting design. Includes instrumentation and equipment, electricity and electronics, control systems, operational and maintenance principles and procedures for stage electricians.

4557-6557. Technical Production Studio: Costume. (3). Intermediate costume construction techniques employing both traditional and experiential methods for sewing. Brings costume design from concept to reality. PREREQUISITE: THEA 3562 or permisssion of instructor.

4561. Design Studio: Scenic. (3). Application of design principles to study of analysis, design process, and graphic skills. Creative expression and portfolio development also stressed.

4562. Design Studio: Lighting. (3). Lecture/seminar/practicum investigation of arts of lighting design. Includes: script analysis, design approaches and methodologies, procedures and practices for working designers, cue techniques, design styles and forms, and criticism of lighting design. Research project work and staged scenes required. PREREQUISITE: THEA 4556 or permission of instructor.

4563. Design Studio: Costume. (3). Theories and techniques of aesthetics of costume design as applied to contemporary theatre. Script analysis for costume design. Character and period interpretation through line, color, and fabric.

4571-6571. Playwriting. (3). Theory and principles of writing plays for stage. Practice in writing either short or long play. *May be repeated for maximum of 9 semester hours. (Offered alternate years).* PREREQUISITE: permission of instructor. **[W].**

4582. Script Interpretation. (3). Exploration of the script as blueprint for realization of artistic stage image. Special attention given to plot, structure, character treatment, and language style as they relate to performance, direction, and scenography. *(Offered alternate years).* PREREQUISITE: major or minor in Department of Theatre and Dance. **[I, W].**

4591. Theatre Management. (3). Procedures and practices for stage management; theatrical production management; box office; publicity and promotion for theatre and performing arts. Comparative study of commercial, educational, and amateur theatre operations. *(Offered alternate years).* **[C].**

4592-6592. Theatre Architecture And Facilities Planning. (3). Processes and techniques employed by theatre planners in design and construction/renovation of theatrical spaces and structures. Includes survey of theatre forms, historical development of theatrical structures and spaces, programming methods and procedures, specification, renovation techniques, multi-use structure concepts, and consultation procedures and practices. *(Offered alternate years).* PREREQUISITE: permission of instructor.

4595-6595. Technical Production Studio: Sound. (3). Technical principles that support areas of theatrical sound design. Includes digital and analog equipment, audio signal theory and technologies, systems design, software, and operational principles and procedures for theatrical sound engineers.

4596. Design Studio: Sound. (3). Lecture/seminar/practicum investigation of the art of theatrical sound design. Includes: script analysis, creative design processes and aesthetics, cue techniques, design styles and forms, procedures and practices for work-

ing designers and criticism of sound design. PREREQUISITE: THEA 4595 or permission of instructor.

4631-6631. Acting for Film and Television. (4). Educational experience for actor in media of film and television, concentrating on dramatic, commercial and documentary areas. *(Offered alternate years).* PREREQUISITE: permission of instructor.

4980. Honors Studies. (3). (COMM, THCA). Reserved for students enrolled in Theatre and Dance Honors Program. *May be repeated for a maximum of 15 hours.* PREREQUISITE: Permission of Director of Theatre and Dance Honors Program.

4982. Honors Seminar. (3). (THCA). Intensive study of particular problems in theatre and dance. *May be repeated for a maximum of 12 hours when semester topics vary.* PREREQUISITE: permission of Director of Theatre and Dance Honors Program.

4999. Senior Honors Thesis. (3). (COMM 4981, THCA 4999). Supervised independent research project. Open only to students enrolled in the Theatre and Dance Honors Program. *May be repeated for a maximum of 6 hours.* PREREQUISITE: permission of Director of Theatre and Dance Honors Program.

DANCE (DANC)

DANC 1821, 1825, 1827, 2821, 2825, and 2827 may be used to fulfill the university degree requirements for physical activity courses. See *Graduation from the University* for details.

1151. Introduction to Dance. (3). Comprehensive study of dance as an expressive art form, a symbolic language, and an integral aspect of world cultures. Emphasis on developing both aesthetic response and critical skills through an analysis of major dance forms, styles, and genres. **[G].**

1821. Modern Dance I. (2). Introduction to modern dance techniques; emphasis on exploration of fundamentals of dance. For student with little or no previous experience in modern dance. *May be repeated for a maximum of 4 semester hours with permission of instructor.* **[G].**

1825. Ballet I. (2). Introduction to classical ballet technique; emphasis on barre and center floor work. For student with little or no previous experience in ballet. *May be repeated for a maximum of 4 semester hours credit with permission of instructor.* **[G].**

1827. Jazz Dance I. (2). Contemporary jazz dance techniques; emphasis on fundamentals of idiom. For student with little or no previous experience in jazz dance. *May be repeated to a maximum of 4 hours with permission of instructor.* **[G].**

2101. Dance Improvisation. (3). Elements of space, time and force; their interrelationships and their specific applications to movement sequences. Experiences in spontaneous development of dance phrases. *May be repeated to a maximum of 6 hours with permission of instructor. (Offered alternate years).* PREREQUISITE: permission of instructor.

2821. Modern Dance II. (2). (1822). Intermediate modern dance techniques. *May be repeated to a maximum of 4 hours with permission of instructor.* PREREQUISITE: DANC 1821 or permission of instructor. **[G].**

2825. Ballet II. (2). (1826). Intermediate ballet techniques. *May be repeated to a maximum of 4 hours with permission of instructor.* PREREQUISITE: permission of instructor. **[G].**

2827. Jazz Dance II. (2). (1828). Intermediate jazz dance techniques. *May be repeated to a maximum of 4 hours with permission of instructor.* PREREQUISITE: DANC 1827 or permission of instructor. **[G].**

3101. History of Dance. (3). Basic features of and uses for dance and expressive movement from early cultures to present. *(Offered alternate years).*

3201. Dance Movement Analysis. (3). Theory and methods of analyzing and describing dance movement. Varied semester topics: dance notation, Laban movement analysis, Bartenieff fundamentals, rhythmic analysis, kinetic awareness and body alignment techniques. *Repeatable up to 6 hours with permission of instructor.* PREREQUISITE: permission of instructor. *(Offered alternate years).*

3829. Advanced Dance Techniques. (3-4). Intensive development and refinement of dance technique. Focus on artistic concerns appropriate to advanced level. *Repeatable for a maximum of 12 hours with permission of the instructor; repetition will not result in a change of any grade previously given.* PREREQUISITE: permission of instructor.

4000-4029-6000-6029. Special Topics in Dance. (1-3). Topics are varied and announced in *Schedule of Classes. May be repeated to a maximum of 9 hours when topic varies.*

4101-6101. Dance Repertory. (3). Exploration of stylistic, techinical, and expressive elements in rehearsal and performance. May include notated works, faculty and guest artist choreography. *May be repeated for a maximum of 9 hours.* PREREQUISITE: permission of instructor.

4201-6201. Dance Composition. (3). Investigation of movement sources and development of elements of choreographic craft. Emphasis on solo and duet work. *May be repeated for a maximum of 6 hours with permission of instructor. (Offered alternate years).* PREREQUISITE: permission of instructor.

4202-6202. Advanced Dance Composition. (3). Continued investigation of movement sources and choreographic craft from concept development through rehearsal and performance. Emphasis on group forms. *May be repeated for a maximum of 6 hours.* PREREQUISITE: DANCE 4201 or permission of instructor.

4301-6301. Directed Studies in Dance. (1-3). Individual study, research or practicum. *May be repeated for a maximum of 12 hours.* PREREQUISITE: permission of instructor.

The College of Education

NATHAN L. ESSEX, Ph.D., *Dean*
Room 215, The College of Education Building
http://www.coe.memphis.edu/

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
Consumer Science and Education	Consumer Science and Education	Dietetics Food Systems Management Home Economics Instruction Merchandising—Fashion Merchandising—Home Furnishings	Bachelor of Science in Education (B.S.Ed.)
Human Movement Sciences and Education	Exercise and Sport Science	Exercise Science and Health Promotion Physical Education	Bachelor of Science in Education (B.S.Ed.)
	Sport and Leisure Studies	Urban Sport Leadership Urban Leisure Leadership	Bachelor of Science In Education (B.S.Ed.)
Instruction and Curriculum Leadership	Human Development and Learning	Early Childhood Education (PreK-3 Licensure) Elementary Education (1-8 Licensure) Schools and Society (Non-Licensure)	Bachelor of Science in Education (B.S.Ed.)
	Changes in teacher licensure requirements are being proposed by the State Board of Education effective for all students entering Fall 1999, thus teacher licensure programs will change in response to these mandates. The catalog validity date will correspond to the fall term in which the changes are implemented.		
	Special Education		Bachelor of Science in Education (B.S.Ed.)

Individual program requirements described in the *Undergraduate Issue of the 1997-1999 Bulletin of The University of Memphis* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this bulletin; or consult the undergraduate bulletin website at: http://www.memphis.edu for the latest catalog updates.

PURPOSES

The College of Education is dedicated to preparing students for careers in a variety of professional and related occupational areas. In helping the university pursue its three broad objectives of teaching, public service, and research, the College of Education is committed to the following missions. The first mission of the College of Education is to prepare teachers, other licensed school personnel, and educationally-related professionals who are qualified and competent in both practice and theory. The second mission is to conduct educational and educationally-related research and to engage in the dissemination of the outcomes of that research. The third mission of the college is tightly interwoven with the two preceding missions: to provide teaching, research and service that extends beyond the confines of the campus and to make educational delivery available in its urban setting and at other outreach locations.

The departments in the college value the pursuit and practice of quality teaching and research in a multicultural setting. Specifically, the college actively seeks to foster the advancement of knowledge and pedagogy involved in educational training in school and non-school settings. With a priority on urban-related studies, both faculty and students are engaged in timely, diverse experiences of a scholarly nature.

This mission and vision for the College of Education is embodied in the theme of *Educational Leaders*. The college seeks to prepare leaders who demonstrate a thorough knowledge of the learning process, skill in instructional planning and delivery, and a disposition to create dynamic learning environments that incorporate multicultural knowledge into instructional design and delivery.

AREAS OF PROFESSIONAL TRAINING

The College of Education offers a wide selection of general and specialized programs that are designed to prepare students for a variety of careers.

Careers in Teaching

One of the most important professions in a society is teaching its children and young people. Preparing students to become excellent teachers is a primary goal of the College of Education. A career in teaching offers a wide range of specialization choices and opportunities in prekindergarten, kindergarten, elementary, junior high, and senior high schools.

Through the College of Education,there are programs at the undergraduate level for licensure in early childhood (PreK-3), elementary (1-8), special education (K-12), and physical education (K-12).

Students who wish to prepare for other endorsements in Secondary Education and K-12 teaching fields will be expected to complete a baccalaureate degree in the appropriate teaching area followed by a fifth-year Master of Arts in Teaching or licensure program through the College of Education. Recommendation for teacher licensure in these areas is contingent upon successful completion of the Master of Arts in Teaching degree or licensure program.

Preparation for the various teaching areas includes a significant professional education component that emphasizes both a comprehensive knowledge base and an extensive skills requirement to ensure pedagogical competency. To meet these objectives, there is provision for significant laboratory and field experiences culminating in enhanced student teaching in the student's senior year.

Careers in Related Occupational and Professional Areas

Career options are available in related occupational and professional areas of Dietetics, Home Economics Instruction, Food Systems Management, Fashion

Merchandising, and Home Furnishings Merchandising through the Department of Consumer Science and Education. Students have the opportunity to prepare for careers in Exercise Science and Health Promotion, Physical Education, Urban Leisure Leadership, and Urban Sport Leadership through the Department of Human Movement Sciences and Education. For additional information consult the College of Education General Advisor or the department chair.

ORGANIZATION OF THE COLLEGE

Five academic departments make up the College of Education: Consumer Science and Education; Counseling, Educational Psychology and Research; Instruction and Curriculum Leadership; Human Movement Sciences and Education; and Leadership. Three departments offer undergraduate degrees, and all departments offer a variety of graduate degree programs.

In addition, there are several research and service units in the college: Advisory Services, The Bureau of Educational Research and Services, The Center for Higher Education, The Reading Center, The Center for Environmental and Energy Education, The Center for Research in Educational Policy, The Barbara K. Lipman Early Childhood School and Research Institute, and the University Campus School.

College Honors Program

The College of Education Honors Program provides opportunities for students of junior standing to demonstrate excellence in academic achievement. It offers a series of specially designed honors sections and courses from which 18 semester hours must be taken. A 3.25 grade point average must be maintained. Specific information about the College Honors Program may be obtained in the individual departmental offices.

Academic Advising

Student advising in the College of Education is an essential support service provided to assist students in the process of clarifying academic goals consistent with their interests, abilities, values, and resources. Advisors provide academic, career, and professional information to assist students in developing realistic personal and career goals. Advisors also provide information about university support services and resources available to students.

All undergraduate students entering the college are advised initially by the College of Education general advisor. The general advisor assists students in becoming familiar with programs offered in the college and guides them through the beginning phases of their programs. Later faculty advisors or program coordinators in specific majors assist the students until graduation. **This assistance does not relieve the student of the primary responsibility of studying the bulletin and fulfilling all degree requirements.**

B.S.ED. REQUIREMENTS (TEACHER LICENSURE)

Professional Studies for Educators

Professional studies in the College of Education consist of both generic courses taken by all persons planning careers as educators and specialized studies related to specific professional practice settings. All teacher education students will study knowledge and skills in human development, basic instruction, technology, foundations, cultural diversity, and children with special needs. Required courses for knowledge and skills include EDPR 2111, LEAD 2010, ICL 3000, ICL 4800, SPED 2000, and student teaching. Necessary skills in assessment, behavior management and specialized instructional methods are incorporated in courses delivered by their respective specialty areas. Specific requirements are listed in the section of the bulletin addressing each major.

Accreditation

The College of Education holds membership in the American Association of Colleges for Teacher Education. Its undergraduate programs, as well as all graduate degree programs through the doctor's degree, for the preparation of teachers and related school personnel, are fully accredited by the National Council for Accreditation of Teacher Education (NCATE).

Licensure Areas

Changes in teacher licensure requirements are being proposed by the State Board of Education **effective for all students entering Fall 1999,** thus teacher licensure programs will change in response to these mandates.

Areas of licensure that are available at the completion of undergraduate education programs include:

Special Education	
Modified K-12	(460)
Comprehensive K-12	(461)
Physical Ed K-12	(420)
Elementary 1-8	(402)
Elementary PreK-3	(403)

Recommendation for teacher licensure in any of the following teaching areas is contingent upon the completion of a baccalaureate degree in the appropriate academic area followed by completion of the Master of Arts in Teaching degree or licensure program:

Elementary 1-8	(402)
Elementary PreK-3	(403)
Special Education	
Modified K-12	(460)
Compreh K-12	(461)
Early Ch PreK-I	(465)

Secondary (Internship)
Secondary (Enhanced Student Teaching)

English 7-12	(407)
French 7-12	(411)
German 7-12	(412)
Spanish 7-12	(409)
Russian 7-12	(406)
Latin 7-12	(410)
Mathematics 7-12	(413)
Biology 7-12	(415)
Chemistry 7-12	(416)
Physics 7-12	(417)
Earth Science 7-12	(418)
History 7-12	(421)
Government 7-12	(423)
Geography 7-12	(422)
Economics 7-12	(424)
Psychology 9-12	(426)
Sociology 9-12	(425)

Vocational Subject Areas

Basic Business/Accounting	(430)
Data Processing	(434)
Marketing/Econ	(471)
Consumer Hmkng. 5-12	(450)
Care/Gdce Child 9-12	(451)
Food Mgt. Prod 9-12	(453)

Other MAT Subject Areas

Visual Arts	(427)
Music Inst. K-12	(429)
Music Voc/Gen K-12	(428)
Physical Ed K-12	(420)
Health K-12	(419)

Students who intend to enter the Master of Arts in Teaching program should consult their major advisor or the College of Education Advisor for information about this program to ensure that the general education curriculum, preprofessional studies, and teacher licensure requirements are completed.

Other Graduate Areas

Speech/Language PreK-12	(464)
Counselor K-12	(487)
School Administrator Begin K-12 (B)	(481)

Old Licensure Areas Still Operating

School Psychologist	(089)
Special Teacher of Reading K-8	(075)
Special Teacher of Reading 7-12	(076)
English as a Second Language	(301)

Admission to Teacher Education Program

Students who plan to pursue an undergraduate program of studies leading to teacher licensure must submit a formal application to the College of Education Teacher Education Program (TEP). Students are encouraged to apply for admission as soon as they enroll in courses in the college.

Prerequisites for formal admission to the Teacher Education Program are as follows:

1. Admission application completed and submitted.
2. Grade of C or above In ENGL 1101, 1102, COMM 2381, EDPR 2111, and LEAD 2010.
3. Satisfactory scores on the Pre-Professional Skills Tests (PPST) or an ACT Enhanced score of 22 or higher according to criteria established by the Tennessee State Board of Education and the College of Education, The University of Memphis.

4. Minimum of 25 semester hours completed.
5. Overall GPA of no less than 2.5.
6. Satisfactory completion of a personal interview and writing exercise.
7. Satisfactory scores on the General Knowledge and Communication Skills sections of the Praxis Series/ National Teacher Examination (NTE), according to the criteria established by the Tennessee State Board of Education.

Appeals

1. Students who do not meet the admissions criteria will be allowed to obtain Conditional Admission only if their deficiencies can be remediated within one semester. Conditional Admission status can be secured for one semester only.
2. During their next enrollment period, conditionally approved students will be allowed to enroll in professional education courses with the exception of student teaching. If at the end of that semester they are not able to meet the criteria for admission, they will be disapproved. Students may check with the Coordinator of Field Experiences about alternative admissions.

Retention

In order to remain in the Teacher Education Program, students must maintain a 2.50 GPA. If all requirements for retention have not been met, a faculty committee will review the student's academic record and other pertinent information and set up an interview with the student. Academic, social, and ethical issues can be reviewed in retention decisions. This review may result in a recommendation to the dean of the college for (1) continuation for a specific provisional period with specified conditions for continuation in the program; or (2) dismissal from the program.

Pre-Student Teaching Clinical Experiences

Students pursuing teacher licensure complete, as a part of their program, a variety of required clinical experiences incorporated into professional education courses. Students will be expected to have experiences in a variety of settings and with pupils who reflect differences in age, socioeconomic backgrounds, and cultural heritage.

Clinical experiences include both laboratory experiences (typically fulfilled on campus) and field experiences (typically fulfilled in PreK-12 school settings). The PreK-3 early childhood programs require field experiences in those grade levels. The 1-8 program requires placements at the 1-4 and 5-8 grade level. The 1-8 program has a middle school emphasis. The amount of time spent in a clinical experience varies according to the specific requirement being met. Fulfillment of these experiences requires that students make available out-of-class time between 7:00 a.m. and 4:00 p.m. All students are required to complete up to 99 clock hours of approved in-school clinical experiences prior to student teaching.

Completion of field experiences will occur in sites arranged and approved by The University of Memphis College of Education Office of Teacher Education.

Student Teaching

Students who pursue degree programs at The University of Memphis that lead to teacher licensure must complete their student teaching requirements in placements arranged, coordinated, and approved by the Coordinator of Field Experiences of the College of Education. Normally, student teaching assignments are full-day in length for a designated number of weeks.

Student teaching is offered only during the fall and spring semesters in area schools. No student teaching assignments for initial licensure are made during the summer semester. Under the direction of cooperating teachers and university supervisors, opportunities are provided for observation of sound teaching practices and for realistic experiences culminating in assumption of full-time teaching responsibilities.

All students are required to complete a professional semester consisting of a minimum of 15 weeks of student teaching and an associated seminar. NO OTHER COURSES MAY BE TAKEN DURING THE PROFESSIONAL SEMESTER.

Students who have completed all or part of their student teaching experiences before enrolling at The University of Memphis, and who desire to receive this institution's recommendation for licensure, should expect to complete a minimum of six semester hours of credit in student teaching at The University of Memphis.

Grades in student teaching are reported as S (satisfactory) or U (unsatisfactory).

Requirements for enrollment in student teaching are:

1. Application filed during the semester before student teaching.
2. Full admittance to and good standing in the Teacher Education Program one semester before student teaching.
3. Classification as a senior or graduate student.
4. Completion of all prerequisite professional education courses.
5. Grade of C or above in each required professional education and each major course.
6. Recommendation by a faculty committee.

Graduation

To be recommended for graduation and licensure, students must complete the requirements listed below:

1. Minimum of 132 semester hours, including at least 45 hours of upper division courses.
2. Overall GPA of no less than 2.50.
3. GPA of no less than 2.50 in all courses taken at The University of Memphis, excluding all credit transferred from other institutions.
4. Grade of C or above in each required professional education course and each course in the major.

For Tennessee Teacher Licensure, students must obtain satisfactory scores in the Core Battery and Specialty Area Examinations of the National Teacher Examination (NTE), according to the criteria established by the Tennessee State Board of Education.

Any courses taken in excess of those needed to fulfill the requirements of professional education courses and major and minor endorsement areas, are considered to be general electives and are included only in the calculation of the overall GPA. In those areas where students are required to take elective courses, the student, in consultation with and approval of the major advisor, designates where the elective courses are to be applied.

B.S.ED. DEGREE (132-137 Hours)

B.S.ED. GENERAL EDUCATION (48-62 hours)

Changes in teacher licensure requirements are being proposed by the State Board of Education effective for all students entering Fall 1999, thus teacher licensure programs will change in response to these mandates. The catalog validity date will correspond to the fall term in which the changes are implemented.

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381, with a minimum grade of C

Mathematics (3-6 hours): MATH 1181-1182 (6) or one of the following: MATH 1312, 1321 (4), 2000.

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301; PHIL 1101; POLS 1101; UNIV 2850, 3580; plus one course from **post-1500**: HIST 1302; PHIL 1102; POLS 1102; UNIV 2860, 3581.

NOTE: *Early Childhood (PreK-3 Licensure) and Elementary Education (Grades 1-8 Licensure) must select PHIL 1102 and HIST 1301 or CLAS 2481.*

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282; GEOG 3401; HIST 2601, 2602, 3863, 3900, 4851, 4881; POLS 4212, 4405; SOCI 3422.

Social Science (6-9 hours): One course from list A and one course from list A or list B:

A. (Global Perspective): ANTH 1200; CJUS 2110; ECON 2110; GEOG 1301, 1401; POLS 2301, 2501; PSYC 2201; SOCI 2100, SOCI 2101/CSED 2101; UNIV 2304.

B. ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

NOTE: *Early Childhood Education (PreK-3 Licensure) and Elementary Education (Grades 1-8 Licensure) must select the following 9 hours: GEOG 1301 or 1401, and POLS 1100, and SOCI 1111. Special Education Majors must take PSYC 1101, and CSED/SOCI 2101 is recommended as one of the other courses. Exercise and Sport Science Majors must select PSYC 1101.*

Natural Science: (8-16 hours—sequence required): BIOL 1071/1072-1081/1082; BIOL 1151/1152 1161/1162; CHEM 1101-1102; CHEM 1131/1121-1132/1122; GEOG 1001/1011-1002/1022; GEOL 1101-1103; PHYS 1001/1010-1002/1020; PHYS 2003/2510-2004/2520; UNIV 1610-1611.

NOTE: *Early Childhood Education (PreK-3 Licensure) and Elementary Education (Grades 1-8 Licensure) must take one 2-part sequence with lab selected from:*

Biology: BIOL 1151/1152-1161/1162; BIOL 1071/1072-1081/1082

Physical Science: CHEM 1101-1102. 1121/1131-1122/1132; PHYS 1001/1010-1002/1020, 2003/2510-2004/2520

Earth Science: GEOG 1001/1011-1002/1022; GEOL 1101-1103

Plus two courses — one course from each area not covered in the above sequence: Biology, Earth Science (GEOG or GEOL), Physical Science (CHEM or PHYS).

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821,1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212: ARMY 2115/2120; NAVY 1100, 1104, 2206 and either 2204 or 3000. Students completing NAVY 1100, 1104, 2206 *and* 2204 *or* 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

NOTE: *Early Childhood Education (PreK-3 Licensure) must take PHED 1811. PHED 1811 is recommended for Elementary Education (Grades 1-8 Licensure). Exercise and Sport Science majors must select PHED 1713, or any other higher level swimming.*

Computation Intensive (3 hours): At least one upper division course designated as computation intensive **[C]** and approved by advisor. Prerequisite: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive **[W]** and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as Integrative **[I]** and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication and rhetoric, and mathematics requirements.

Computer Literacy (3-4 hours): Included in major requirements (Most may be satisfied by taking ICL 3600 or its equivalent). Consult advisor.

MAJORS

In addition to completing the degree requirements listed above for teacher licensure, B S Ed. students must complete requirements for the Human Development and Learning, Exercise and Sport Science (Physical Education concentration), or Special Education major. Following the requirements for these majors are the requirements for the nonlicensure degree and majors offered through other departments in the college.

HUMAN DEVELOPMENT AND LEARNING

The Major (75 hours): Successful completion of B S Ed. requirements with a major in Human Development and Learning will qualify a person to apply for licensure in either Early Childhood Education (Grades PreK-3) or Elementary Education (Grades 1-8). A concentration in Schools and Society (non-licensure) is also available to students who are not seeking teacher licensure.

1. **Major Core (21 hours):** ICL 3511, 3600, SPED 2000, CCFA 3001; and one course from each of the following three areas:

   Race and Ethnicity: SOCI 3401, 3422, 4420, or 4442.

   Family and Culture: ANTH 3511, 4411; HIST 4831,4863, or SOCI 3831.

   Gender: SOCI 3432 or 4460.

2. **Major Collateral (12 hours):**

a. Early Childhood Education (Grades PreK-3 Licensure) must take EDPR 3300, 3301; ECED 3555, 3565

b Elementary Education (Grades 1-8 Licensure) must take EDPR 3121, 3302; EXSS 3604 (2); ICL 2601 (1), 3501

c. Schools and Society (Non-Licensure) must take EDPR 3121,3302; EXSS 3604 (2); ICL 2601 (1), 4800

3. **Concentrations (Select one; 33 hours):**

a. Early Childhood Education (Grades PreK-3 Licensure) (33 hours): ECED 4510, 4520, 4530, 4540; ELED 4242 (6); ICL 3000, 4800 **[I]**; a 15-week enhanced student teaching experience in primary and kindergarten or prekindergarten settings (9 hours): ICL 4902, and either ICL 4901 or 4903.

b. Elementary Education (Grades 1-8 Licensure) (33 hours): ELED 3251, 3261, 3271, 4242 (6), 4344; ICL 3000, 4800 **[I]**; a 15-week enhanced student teaching experience in appropriate settings (9 hours): ICL 4904

c. Schools and Society (Non-Licensure) (33 hours): SOCI 3820, ANTH 4051; and 9 hours selected from each of the following groups to total 27 hours:

1) ECED 3555, 3565; EDPR 3100 **[C]**, 3300, 3301; PSYC 3103; CSED 3401.

2) EDPR 4530, 4541 **[C]**; SWRK 2911; SOCI 3801, 4842; CSED 4104; COUN 4621; ICL 4111.

3) SOCI 3401, 3422, 3432, 3831, 4420, 4442, 4460; ANTH 3511, 4411; HIST 4831, 4863 **[W]**. NOTE: The 9 hours selected from area 3 may not duplicate courses selected to meet the Human Development and Learning major core requirements

4. **Related Liberal Studies (9 hours):** EDPR 2111; LEAD 2010; EXSS 3306.
5. **Electives:** to bring the total for the degree to at least 132 hours.

EXERCISE AND SPORT SCIENCE

The Major: (75-78 hours): Successful completion of B S Ed. requirements with a major in Exercise and Sport Science and a concentration in Physical Education Instruction will qualify a graduate to apply for licensure in Physical Education (K-12). Non-licensure majors should refer to the non-licensure requirements in the next section.

a. Major Core (27-30 hours): BIOL 1751/1752 (4), 1761/1762 (4) (minimum grade of C); EXSS 2001, 3703 (4), 3803, 4204 **[C]**, 4403; HMSE 2102; ICL 3600.

b. Physical Education Concentration (24 hours): EXSS 2002, 2003, 2009, 3307, 3308 (2), 3309 (1), 3604 (2), 3605 (1), 3903 **[W]**, 4808 (2), 4809 (1).

c. Professional Education (24 hours): EDPR 2111; ICL 3000, 4800 **[I]**, 4909 (9); LEAD 2010; SPED 2000. Professional Seminar (ICL 4800) required during student teaching semester.

d. Electives to bring the total for the degree to at least 132 semester hours.

In some of the above courses, variable hours of supervised laboratory/field experience will be required.

SPECIAL EDUCATION

The Major: (82 hours): Successful completion of B S Ed. requirements with a major in Special Education will qualify a person to apply for licensure in Special Education, both Modified (K-12) and Comprehensive (K-12) This major is also available to students who are not seeking licensure in which case guided electives will be chosen with advisor approval in lieu of the Professional Semester. *NOTE: SPED 3800, 3801, 3802, and 3803 must be taken simultaneously.

a. Major Core (36 hours): SPED 2000, 3201, 3401, 3501, 3601, *3802, *3803, 4900; ELED 3251, 4242 (6); and one of the following: EXSS 3308 (2) and EXSS 3309 (1); COUN 4621, 4781; REHB 3911, or ELED 4344

b. Professional Education (28 hours): ICL 3000, 4800; SPED *3800, *3801, 4000, 4001; fifteen weeks of student teaching in at least three settings: resource/consultative, comprehensive, and regular classrooms: ICL 4905 (4), 4906 (4), 4904 or 4907 (2).

c. Related Liberal Studies (18 hours): HMSE 2102, ICL 3600, EDPR 2111, 3302; LEAD 2010; and one of the following: PSYC 3102, SOCI 3501, or EDPR 3121.

d. Electives to bring the total for the degree to at least 132 semester hours.

B.S.ED. REQUIREMENTS (NON-LICENSURE)

Non-licensure B.S.Ed. programs include the major in Consumer Science and Education which is offered through the Department of Consumer Science and Education and the following majors offered through the Department of Human Movement Sciences and Education: Exercise and Sport Science, and Sport and Leisure Studies. Students may also complete the non-licensure major in the Department of Instruction and Curriculum Leadership: Human Development and Learning with a concentration in Schools and Society. Degree requirements for these majors include the following:

Graduation

In addition to specific course requirements listed below, students must complete the following:

1. Minimum of 132 semester hours of which at least 45 hours must be upper division and at least 45-51 hours in liberal content courses.
2. Overall GPA of no less than 2.0.
3. GPA of no less than 2.0 in all credits earned at The University of Memphis excluding all credit transferred from other institutions.
4. GPA of no less than 2.25 in all courses required for fulfilling the completion of the major.
5. For the Exercise and Sport Science, and Sport and Leisure Studies majors, a GPA of no less than 2.5 in all courses is required for fulfilling the completion of the major (including major core, and concentration requirements).
6. For the Exercise and Sport Science, and Sport and Leisure Studies majors, a Grade of C or above in all courses required in the major core and concentration, and a 2.0 average for all guided elective courses.

NOTE: Any courses taken in excess of those needed to fulfill the requirements of the major are considered to be general electives and are included only in the calculation of the overall GPA In those areas where students are required to take elective courses, the student in consultation with and approval of the major advisor, designates where the elective courses are to be applied.

B.S.ED. DEGREE (132-137 Hours)

B.S.ED. GENERAL EDUCATION (48-55 hours)

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381, with a minimum grade of C.

Mathematics (3-6 hours): MATH 1181-1182 (6) or one of the following: MATH 1312, 1321 (4), 2000.

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481 HIST 1301; PHIL 1101; POLS 1101; UNIV 2850, 3580; plus one course from **post-1500**: HIST 1302; PHIL 1102; POLS 1102; UNIV 2860, 3581 NOTE: Consumer Science and Education majors with a Dietetics concentration must take POLS 1102.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282; GEOG 3401; HIST 2601, 2602, 3863, 3900, 4851, 4881; POLS 4212, 4405; SOCI 3422.

Social Science (6-9 hours): One course from list A and one course from list A or list B.

A. (Global Perspective): ANTH 1200; CJUS 2110; ECON 2110; GEOG 1301, 1401; POLS 2301, 2501; PSYC 2201; SOCI 2100, SOCI 2101/CSED 2101; UNIV 2304. NOTE: Consumer Science and Education majors must take CSED/SOCI 2101.

B. ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111. NOTE: Consumer Science and Education majors with a Food Systems Management or Merchandising concentration take ECON 2120 Students with a Dietetics concentration take PSYC 1101 Exercise and Sport Science majors must select PSYC 1101.

Natural Science (8 hours—sequence required): BIOL 1071/1072-1081/1082; BIOL 1151/1152-1161/1162; CHEM 1101-1102; CHEM 1131/1121-1132/ 1122, GEOG 1001/1011-1002/1022; GEOL 1101-1103, PHYS 1001/1010-1002/1020; PHYS 2003/ 2510-2004/2520; UNIV 1610-1611. NOTE: Consumer Science and Education majors with a Food Systems Management concentration take CHEM 1101-1102; with a Dietetics concentration, take CHEM 1131/ 1121-1132/1122.

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120, NAVY 1100, 1104, 2206 and either 2204 or 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4 hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121) NOTE: Exercise and Sport Science majors must select PHED 1713, or any other higher level swimming course.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive **[C]** and approved by advisor. Prerequisite: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive **[W]** and approved by advisor. Prerequisite: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative **[I]** and approved by advisor. Prerequisite: Satisfactory completion of General Education English composition, oral communication and rhetoric, and mathematics requirements.

Computer Literacy (3-4 hours): Included in major requirements Consult advisor.

MAJOR: Completion of one of the majors described below.

ELECTIVES: To bring the total to at least 132 semester hours.

MAJORS

The following majors are offered through the Department of Consumer Science and Education. In instances where a major requirement duplicates a course selected to fulfill General Education requirements, the number of elective hours will be increased.

CONSUMER SCIENCE AND EDUCATION

Due to possible changes in graduation requirements, it is the responsibility of the student to see his/her advisor for updates.

The Major (65-85 hours): Core (18 hours): CSED 1101, 2104, 2202, 3302 (Same as EDPR 3302), 4106 **[W, I]**, 4300; and one of the following concentrations. Students in all concentrations must complete the application for practicum or internships by mid-term of the semester before enrollment for the internships. Students may obtain the form from their major advisor.

DIETETICS (67 hours) CSED 2302, 3602, 4002, 4102, 4302, 4502, 4602, 4612, 4712, 4802; CHEM 3301 (1),3302 (1),3311, 3312, 4511, 4512; BIOL 1751/1752 (4), 1761/1762 (4), 3551 3555 (2); ACCT 2010, MATH 1213 (4); EDPR 4541 **[C]**.

FOOD SYSTEMS MANAGEMENT (49 hours). CSED 2302, 3602, 4302, 4312, 4412, 4502, 4702, 4722; ACCT 2010; ISDS 2710 or EDPR 4541 **[C]**; ISDS 2749 (1), 2755; MGMT 3110, 4420; MKTG 3010, 3410; FIR 3130.

HOME ECONOMICS INSTRUCTION (48-56 hours): CSED 1105, 2302, 3204, 3401, 4405; 15 hours chosen in consultation with advisor from the following courses CSED 2004, 2005, 3602, 4204, 4213, 4217, 4304, 4405, 4412, 4602; in consultation with advisor, 18 hours chosen in the fields of marketing, merchandising, journalism, or in occupational concentration area. Students seeking admission to graduate teacher preparation program take these additional 8 hours: EDPR 3100; LEAD 2010, 4715 (2).

MERCHANDISING (54-57 hours): Core (15 hours): CSED 2106, 3206 **[C]**, 4600 (6), ICL 3600, and select a or b below.

a. **Fashion** (39 hours): CSED 1105, 2005, 4405, 4705 (6); Business Administration Core (24 hours)[1] ACCT 2010,1ECON 2120; MKTG 3010; 6 hours from MKTG 3012, 3610, 4080, and any 29 hours of marketing courses approved by the department chair.

b. **Home Furnishings** (42 hours): CSED 2004, 3204, 4204, 4304, 4314, 4405, 4804 (6); Business Administration Core (18 hours): ACCT 2010; 1ECON 2120; MKTG 3010, and 29 hours in MKTG selected in consultation with advisor.

1Also a General Education option.

2If the student wishes a minor in marketing, it is the student's responsibility to contact the chairman of the Marketing Department in the Fogelman College of Business and Economics before selecting the courses.

NOTE: All merchandising students must complete major subject area courses before the professional semester required in the merchandising concentrations. A cooperative relationship exists with the Fashion Institute of Technology in New York City, whereby Consumer Science and Education—Merchandising majors may enroll for one semester of study in New York with the semester hours earned being transferred toward graduation at The University of Memphis.

The following majors are offered through the Department of Human Movement Sciences and Education. In instances where a major requirement duplicates a course selected to fulfill General Education requirements, the number of elective hours will be increased.

EXERCISE AND SPORT SCIENCE

The Major (63-78 hours): Core (27-30 hours): BIOL 1751/1752 (4), 1761/1762 (4) (minimum grade of C); EXSS 2001, 3703 (4), 3803, 4204 **[C]**, 4403; HMSE 2102; ICL 3600, plus one of the following concentrations and electives to bring the total for the degree to at least 132 semester hours.

PHYSICAL EDUCATION (48 hours) EDPR 2111; EXSS 2002, 2003, 2009, 3307, 3308 (2), 3309 (1), 3604 (2), 3605 (1), 3903 **[W]**, 4808 (2),4809 (1), ICL 3000, 4800 **[I]**, 4909 (9); LEAD 2010; SPED 2000; plus 3-9 hours of general electives.

EXERCISE SCIENCE AND HEALTH PROMOTION (36-42 hours): CSED 2202; EXSS 3310, 3503, 3505, 3603, 4002, 4003, 4602 **[W]**, 4603, 4605 (3-9), 4703, HMSE 4999 **[I]**; MKTG 3010, plus 6-9 hours of guided electives selected in consultation with advisor from the following courses: BIOL 3730, CHEM 3311, 3312, 4511, 4512; COUN 4611, 4621, 4781; EDPR 2111; EXSS 2002, 2003, 2009, 3307, 3308, 3309, 3502, 3604, 3605, 3903, 4406, 4501, 4601, 4808, 4809; FIR 3011; MGMT 1010; MMCS 3130; SLS 3105, 3406, 3600, 3605, 4005, 4105, 4125, 4500; and 0-6 hours of general electives.

In some of the above courses, variable hours of supervised laboratory/field experience will be required.

SPORT AND LEISURE STUDIES

The Major (72-81 hours): Core (54-60 hours): HMSE 2102, 4999 **[I]**, JOUR 3400; MGMT 3110; MKTG 3010; SLS 2105, 2605, 3005, 3105, 3204, 3205, 3305, 3905, 4205, 4125, 4135, 4605 (9-12); plus one of the following concentrations and electives to bring the total for the degree to at least 132 semester hours.

URBAN SPORT LEADERSHIP (21 hours): JOUR 2121; SLS 3600, 3605, 3650, 4145, 4155, 4500, plus 0-6 hours of guided electives selected in consultation with advisor; 0-3 hours of general electives; and satisfactory completion of a Professional Development Portfolio.

URBAN LEISURE LEADERSHIP (21 hours) COMM 3802; SLS 3103, 3104, 3202, 4001, 4005, 4105, plus 0-6 hours of guided electives selected in consultation with advisor; 0-3 hours of general electives; and satisfactory completion of a Professional Development Portfolio.

EDUCATION COURSE DESCRIPTIONS

CONSUMER SCIENCE AND EDUCATION

PROFESSOR DIXIE R. CRASE, *Chair*
Room 404, Manning Hall
http://www.coe.memphis.edu/coe/csed/csed.html

CONSUMER SCIENCE EDUCATION (CSED)

Due to possible changes in graduation requirements, it is the responsibility of the student to see his/her advisor for updates.

1101. Personal Development and Human Relations. (3). (HMEC). Individual and group adjustment and influences contributing to successful marriage and family life.

1105. Clothing Selection and Construction. (3). (HMEC). Standards in selecting and purchasing, construction of cotton garments to meet individual needs. *One lecture, four laboratory hours per week.*

2004. Technical Skills for Home Furnishings. (3). (HMEC). Students interested in housing, home furnishing, and related areas focus on varied program of technical skills involving quick-sketch problems, free hand floor plans, and collages. For home economics majors who lack skills necessary to demonstrate concepts of depicting home furnishing interiors

2005. Introduction to Fashion Merchandising. (3). (HMEC). Introduction to the types of enterprises, activities, operations, interrelationships, and practices in fashion industry. Emphasis on merchandising terminology and techniques.

2101. The Family in Global Perspective. (3). (HMEC). (Same as SOCI 2101). Introduction to family as a primary, global, social institution. Contributions sociology, anthropology, and home economics have made to understanding how and why family systems vary worldwide and common bonds and problems facing families in modern societies. **[G]**.

2104. Home Furnishings and Related Arts. (3). (HMEC). Elements and principles of design applied to selection and arrangement of house and its furnishings.

2106. Visual Merchandising. (3). (HMEC). Theory and practice in visual merchandising (display); especially retail interior and window display techniques, display creation, planning promotions, and determining budgets.

2202. Nutrition. (3). (HMEC). Study of nutrients for the consumer. Nutrition for preventive health throughout the life cycle.

2302. Principles of Food Preparation. (3). (HMEC). Multicultural aspect of food selection, availability, and life style influences. *One lecture, four laboratory hours per week*

3100. Consumer Education. (2). (HMEC 3100, 3405). Examination of consumer problems in today's market place; emphasis on decision making, consumer rights and responsibilities and consumer information sources.

3204. Housing and Equipment. (3). (HMEC 4203, 3204). (Same as ART 3204). Socio-economics and design aspects of housing; kitchen planning principles, selection, use, and care of household equipment. PREREQUISITE: CSED 2104.

3206. Merchandising Systems.(3). (HMEC). Analysis of formulas used to plan and control the flow of merchandise through the use of both computer and manual systems PREREQUISITE: Satisfactory completion of the General Education mathematics requirements. Accounting also recommended. **[C].**

3302. Child and Adolescent Development. (3). (EDUC 3302). (Same as EDPR 3302). Principles and processes of child and adolescent development applied to education. PREREQUISITE: EDPR 2111 (CSED 1101 FOR CSED MAJORS).

3401. Parenthood Education. (3). (HMEC). Parental role, parent-child relationship, and factors that influence parenthood.

3602. Food Service Equipment and Furnishings. (3). (HMEC). Principles of food service equipment selection and use. Critical thinking and problem solving related to food service design and layout. Technology of food service equipment for commercial and institutional settings PREREQUISITES CSED 2104 and 2302, or permission of instructor.

4002. Advanced Nutrition. (3). (HMEC 4002, 4402). In-depth study of nutrients and body utilization and discussion of current issues in nutrition. PREREQUISITES: CSED 2202, CHEM 1131/1121, 1132/1122.

4101-6101. Preschool Curriculum. (3). (HMEC). Application of child development principles to program planning; infancy through four years of age.

4102. Diet Therapy. (3). (HMEC). Dietary problems applicable to prevention and treatment of disease in which therapeutic diets are of major importance. Computer applications in diet modifications. PREREQUISITES: BIOL1751-1752,BIOL 1761, 1762, CSED 2202, 4002; or permission of instructor.

4106. Trends and Issues in Home Economics. (3). (HMEC 4106, 3106). Senior capstone seminar that applies synergistic thinking to integrative discipline of home economics and specializations that make up the discipline. Focus on changing trends, issues and technology affecting today's home economics professional. Professional orientation and leadership skills critiqued and enhanced in oral and written activities **[W, I]**.

4204-6204. Furnishings Problems and Presentations. (3). (HMEC). Critical thinking and problem solving related to planning, coordinating, and purchasing of home furnishings. *Two lecture, one lab hour per week.* PREREQUISITE: CSED 2004, 4304.

4205-6205. Behavioral Science Aspects of Clothing. (3). (HMEC). Interdisciplinary study of clothing and appearance: concepts, methodologies, and applications of behavioral science to clothing.

4211-4217. Readings. (1-3). For Senior Consumer Science majors. In-depth reading or research in area of specialization. PREREQUISITE: Senior Consumer Science majors only.

4211. Readings in Child Development and Family Relations. (HMEC 4200-001).

4212. Readings in Foods and Nutrition. (HMEC 4200-002).

4213. Readings in Family Economics and Consumer Education. (HMEC 4200-003).

4214. Readings in Housing and Home Furnishings. (HMEC 4200-004).

4215. Readings in Clothing and Textiles. (HMEC 4200-005).

4216. Readings in Fashion Merchandising. (HMEC 4200-006).

4217. Readings in Home Economics Education. (HMEC 4200-007).

4300-6300. Family Resource Management. (3). (HMEC). Investigates values, goals, and human and material resources necessary for individuals and families to make informed management decisions throughout the life span.

4302. Food Service Personnel Management. (3). (HMEC). Management of multicultural food service labor pools including recruiting, selection, and training. Global influences on personnel availability.

4304-6304. Trends in Housing and Home Furnishings. (3). (HMEC 4304, 3104). Major trends and influences on contemporary residential furnishings as these affect home furnishings merchandising. PREREQUISITE: CSED 2104.

4312. Financial Management of Food Systems. (3). (HMEC). Problem solving and critical thinking related to budgeting for food services, managerial finance, and productivity indicators. Use of computer and spread sheets. PREREQUISITE: ACCT 2010.

4314. Contemporary Trends in Housing/Home Furnishings. (3). Multicultural and global trends of the 20th Century on housing and home furnishings. Emphasis on major design influences as they relate to housing/home furnishings.

4383-6383. Materials and Methods in Secondary Home Economics. (3). (HMEC). Methods in high school subjects with an emphasis in Consumer Science and Education Instruction.

4393-6393. Occupational Education in Home Economics. (3). (HMEC 4393, 3393). Special emphasis on instructional strategies and evaluation through classroom and on-site participation. PREREQUISITE: CSED 3383.

4405-6405. Textiles. (3). (HMEC, 3305). Selection, use, and care of textiles related to properties of fibers, yarn structures, fabric construction, and finishes Morphology and chemistry of fibers, finishes, dyes, fabric maintenance, and procedure involved in fiber, yarn, and fabric identification.

4412. Food and Beverage Purchasing. (3). (HMEC). Global influence of food availability, menu planning for multicultural patrons, critical thinking, and problem solving related to purchasing decisions.

4502. Quantity Foods. (3). (HMEC). Menu writing for multicultural patrons, development of critical thinking and problem solving related to food production and quality assurance. Computer applications in food service. PREREQUISITES: CSED 3602, 4412.

4600. Senior Seminar in Merchandising. (6). (HMEC). Concentrated study of factors influencing fashion and home furnishings merchandising functions and transitional process from career academics to career implementation. PREREQUISITES: It is recommended that all other course requirements for graduation be satisfied prior to professional semester. Approved application for admission preceding semester of enrollment. CQREQUISITE: Fashion Concentration—CSED 4705; Home Furnishings Concentration—CSED 4804.

4602-6602. Community Nutrition. (3). (HMEC). Nutritional problems and practices of various ethnic, age, and socio-economic groups. Community and agencies concerned with meeting these needs. PREREQUISITE: CSED 2202 or permission of instructor.

4612. Effective Teaching Methods in Health Care. (3). (HMEC). Development of effective teaching methods for use with patients/clients. Emphasis on demonstration, practice, critique.

4702-6702. Food Production Internship. (3). (HMEC 4702-001, 4302-001). Supervised field experience in the field of food production management.

4705. Fashion Merchandising Internship. (3,6). (HMEC). Supervised full-time work experience in fashion merchandising in approved business establishments. *Majors may not enroll for more than a total of 12 semester hours during professional semester.* CQREQUISITE: CSED 4600. (S/U).

4712-6712. Clinical Nutrition Internship. (3). (HMEC). Supervised field experience in clinical nutrition. PREREQUISITE: CSED 4102. (S/U).

4722-6722. Catering Internship. (3). (HMEC 4702-002, 4202-002). Supervised field experience in the field of catering.

4802. Experimental Foods. (3). (HMEC). Technology related to chemical properties of foods and the development of new food products. Critical thinking and problem solving skills used in the preparation and evaluation of food products. PREREQUISITES: CSED 2102, CHEM 1111, 3311 or permission of instructor.

4804. Home Furnishings Merchandising Internship. (3,6). Supervised full-time work experience in home furnishings merchandising in approved business establishments. *Majors may not enroll for more than a total of 12 semester hours during professional semester.* CQREQUISITE: CSED 4600. (S/U).

4900-4906/6900-6906. Consumer Science Study Tour. (1-3). (HMEC 4900-6900). On-the-scene knowledge about specific academic areas of specialization within Consumer Science and Education. PREREQUISITE: Permission of instructor. *Maximum of 6 credit hours for degree program.*

4900-6900. Study Tour in Consumer Science and Education.

4901-6901. Study Tour: Child Development and Family Relations. (HMEC 4900-001).

4902-6902. Study Tour: Foods and Nutrition. (HMEC 4900-002).

4903-6903. Study Tour: Family Economics and Consumer Education. (HMEC 4900-003).

4904-6904. Study Tour: Housing and Home Furnishings. (HMEC 4900-004).

4905-6905. Study Tour: Clothing and Textiles. (HMEC 4900-005).

4906-6906. Study Tour: Fashion Merchandising. (HMEC 4900-006).

4920-29-6920-29. Special Topics in Consumer Science and Education. (1-3). (HMEC). Lectures and conferences covering selected areas of current interest. See *Schedule of Classes* for topics. *May be repeated; credit applicable to degree is limited.*

4940-49. Workshop in Consumer Science and Education. (1-3). (HMEC). Group study related to specific phases of home economics. *May be repeated.*

COUNSELING, EDUCATIONAL PSYCHOLOGY AND RESEARCH

PROFESSOR MARGARET L. FONG,
Chair
Room 100, College of Education Building
http://www.coe.memphis.edu/coe/CEPR/cepr.html

COUNSELING AND PERSONNEL SERVICES (COUN)

1661. Career Development. (3). Relationship of interests, aptitudes and careers. Includes exploration of work settings and activities to support individual career planning. Students expected to investigate work settings, relate this investigation to academic programs, and utilize this information in individual career development.

4002. Independent Study in Counseling. (1-3). Opportunity for self-directed study andior research under the supervision of faculty member. *May be repeated for a maximum of 6 semester hours credit.* PREREQUISITE: consent of faculty member. (S/U).

4010-29. Special Topics in Counseling and Personnel Services. (3). Topics varied and announced in *Schedule of Classes.*

4150-6150. Interpersonal Skills for Educators. (3). (EDSV, EDUC). Development of human relation skills to enhance educator's ability to interact effectively with people in educational environments.

4611-6611. Introduction to Counseling. (3). Exploration of history, principles and administration of counseling services in community agencies, schools, business and industry. Survey of applicable counseling services, skills and techniques.

4621. Human Interactions. (3). Human relations exercises and other personal experiences related to effective learning climates. Includes communication skills for working in groups, one-to-one relationships, and identification and referral of persons to appropriate resources.

4691. Residence Hall Staff Counseling and Advising. (3). Practical experience for residence hall staff. Instruction and supervision provided. Individual and group activities in counseling, advising, communication, and leadership. Concerns such as drug abuse, family planning information, and student discipline. Utilizes interdepartmental disciplines.

4781. Strategies for Crisis Intervention. (3). Process of crisis intervention. Study and practice in understanding crisis induced dysfunctionaf behavior, recognizing crisis situations. and crisis counseling procedures.

4782. Gerontological Counseling. (3). Survey of demographic, developmental, physiological, sensory and psychosocial aspects of aging as applied to counseling. Experiences in use of appropriate individual and group counseling techniques for aged; emphasis on particular crisis situations such as retirement, leisure, relocation, housing, institutionalization, dying, death, and survivorship.

4783. Alcohol and Drug Abuse Services. (3). Survey of human services for treating alcoholics and substance abusers. Qverview of treatment strategies and philosophies.

EDUCATIONAL PSYCHOLOGY AND RESEARCH (EDPR)

2111. Development Across the Life Span. (3). (EDPS). Principles and processes of human development across the life span.

3100. Assessment and Evaluation. (3). (EDUC). Assessment techniques, test construction, interpretation, and their relationship to instructional decisions. Ethical issues of assessment and assessment needs of diverse populations. **[C]**

3121. Cognitive Processes Applied to Education. (3). Major theories and perspectives on classroom learning; emphasis on cognitive processes, individual differences, strategies for instruction, motivation, critical thinking, and self regulation of learning. PREREQUISITE: EDPR 2111 or permission of instructor.

3300. Infant Development. (3). Theories, philosophies, research, and pedagogy relating to optimal development and education of infants and toddlers. PREREQUISITE: EDPR 2111 or permission of instructor.

3301. Early Childhood Development. (3). Theories, research, and pedagogy which facilitate the cognitive, socioemotional, and physical stages of children's development from 3-8 years of age. PREREQUISITE: EDPR 2111 or permission of instructor.

3302. Child and Adolescent Development. (3). (EDUC). (Same as CSED 3302). Principles and processes of child and adolescent development applied to education. PREREQUISITE: EDPR 2111 or permission of instructor.

4008. Special Problems in Educational Psychology and Research. (1-3). (EDFD). Individually directed reading, field study or research; written report required. PREREQUISITE: permission of instructor.

4301-6301. Early Childhood Development for the Beginning Teacher. (3). Philosophy, theory, research, and pedagogy relating to the physical, cognitive, social, and emotional development of chil-

dren from birth to eight years of age. PREREQUISITES: EDPR 2111 and TEP admission.

4530-6530. Microcomputers in Education: Theoretical and Technical Foundations. (3). (EDRS). History, development, and status of microcomputers in education and introduction to technical knowledge and skills needed to operate microcomputers for specialized educational applications. Prerequisite knowledge for advanced computer-related training in different education specialty areas.

4541. Fundamentals of Applied Statistical Methods. (3). (EDRS). Use of statistical techniques in education and behavioral sciences; emphasis on practical use and interpretation of concepts. Self-instructional. **[C]**

REHABILITATION SERVICES (REHB)

3901. Introduction to Disabling Conditions and Their Helping Professions. (3). (COUN, SPER). Physical mental, and social disabling conditions and their effect on lives of handicapped and their families. Roles of various helping professions in rehabilitation of such conditions.

3911. Techniques of Vocational Evaluation. (3). (COUN, SPER). Introduction to psychometric tests and work samples used in assessment of persons with disabling conditions. Includes administration interpretation, and synthesizing of test results as wel as report writing and use of word processor in developing reports.

3912. Techniques of Work Adjustment. (3). (COUN, SPER). Introduction to techniques and strategies used in work adjustment setting. Includes behavioral observation and reporting, development of behavior management plan, time studies, contract bids, and program development.

4902. Adjustment of Disabling Conditions. (3). (SPER) (COUN). Medical, social, and psychological impact of disabling conditions as related to vocational potential. Includes theories of adjustment to physical and mental disabilities and social and psychological aspects of disabling conditions.

4903. Techniques of Rehabilitation Education. (3). (SPER) (COUN). Focus on theories of human behavioral change as they relate to working with disabled persons. Student will develop life skills curriculum plans and behavioral programs and conduct job/task analysis related to various disability groups.

4905. Assessment Techniques in Counseling. (3). (SPER) (COUN). Use of biographical, psychological. medical and job information for case planning.

4941. Practicum in Rehabilitation. (3-6). (SPER) (COUN). Practical experiences in various rehabilitation settings. PREREQUISITE:REHB 3901 or consent of instructor. (S/U)

HUMAN MOVEMENT SCIENCES AND EDUCATION

PROFESSOR RALPH C. WILCOX,
Ph.D., *Chair*
Room 106, Fieldhouse
http://www.hmse.memphis.edu/

EXERCISE AND SPORT SCIENCE (EXSS)

1102. Personal Health. (3). (HLTH 1102). Concepts of personal health including chronic and infectious diseases, sexually transmitted diseases, mental health, substance use and abuse, health consumerism, sexuality, aging, and death and dying.

1202. Introduction to Community Health. (3). (HLTH 1202). Purposes, roles, responsibilities, and services of community health agencies; environmental health, sanitation, public health, community relations and health career trends and issues. *This course will not be offered after December 1997.*

2001. Concepts and Applications of Conditioning Programs. (3). (PHED 2001). Qverview of physical conditioning programs with emphasis on selection, development and leadership of programs designed to foster cardiovascular and musculoskeletal development. *Variable hours of supervised laboratory/field experience will be required.*

2002. Techniques of Team Sports. (3). (PHED 2002). Knowledge, skills, and teaching techniques of basketball, soccer, softball, track and field, and volleyball to children and youth.

2003. Techniques of Individual Sports. (3). (PHED 2003). Knowledge, skills, and techniques of teaching selected individual sports and recreational games. Includes but not limited to badminton, tennis, and golf.

2009. Dance Instruction in the Exercise and Sport Science Program. (3). (PHED 2009). Knowledge, skills, and techniques of teaching educational dance activities to children and youth.

2103. Fundamentals and Techniques of Football. (2). (PHED 2103). Coaching techniques, training and conditioning methods appropriate to football. *This course will not be offered after December 1997.*

2200. Safety Education. (3). (SAFE 2202, HLTH 2202). Causes of accidents and action designed for prevention of accidents in home, school and community. Content and materials for safety education in school instructional program. *This course will not be offered after December 1997.*

2403. Fundamentals and Techniques of Baseball and Softball. (2). (PHED 2403). Coaching techniques, training and conditioning methods appropriate to baseball and softball. *This course will not be offered after May 1998.*

2503. Fundamentals and Techniques of Volleyball. (2). (PHED 2503). Coaching techniques, training and conditioning methods appropriate to volleyball. *This course will not be offered after December 1997.*

3306. School Health, Safety and First Aid. (3). (HLTH 3306). School health program involving health services, healthful school living, health screening, home and school safety; health content, skills and materials suitable for elementary education; first aid with CPR.

3307. Psychosocial Aspects of Sport. (3). (PHED 3307, 2101). Designed to help students develop understanding of psychological aspects of participation in sport. Emphasis on research and theoretical frameworks related to performance enhancement and enjoyment in sport.

3308. Adapted Physical Activity for Special Populations. (2). (PHED 3308). Nature and etiology of disabilities prevalent in children, knowledge and technical skills pertinent to the design of adapted physical activity programs and the teaching of physical activities for specific disabilities. PREREQUISITES: EXSS 3604/3605, SPED 2000. COREQUISITE: EXSS 3309.

3309. Clinical Experiences in Adapted Physical Activity for Special Populations. (1). (PHED 3309). Observation and participation activities with teaching assistant responsibilities in a laboratory setting in physical activity with special populations. COREQUISITE: EXSS 3308. S/U.

3310. Exercise Programming for Special Populations. (3). Introduction to the principles of cardiovascular medicine related to therapeutic management of various disease states through exercise. Emphasis placed on understanding the medical consequences of various disease states and developing comprehensive rehabilitative programs to decrease physical disability. *Variable hours of supervised laboratory/field experience will be required.*

3402. Chronic and Communicable Diseases. (3). (HLTH 3402). Modern concepts of disease; etiology, screening, detection, prevention and control of common communicable and chronic diseases. *This course will not be offered after May 1998.*

3502. Prevention and Care of Athletic Injuries. (3). (SAFE 3502, HLTH 3502). Practical and theoretical aspects of treatment of athletic injuries in athletic training programs; supplies, training table, therapeutic equipment, and techniques in conditioning and bandaging. PREREQUISITE: HMSE 2102 or consent of instructor.

3503. Health Aspects of Fitness. (3). (PHED 2000, 3503). Health related aspects of physical fitness. Focuses upon relationship between a physically active lifestyle and wellness. *Variable hours of supervised laboratory/field experience will be required.*

3505. Principles of Health Fitness Instruction. (3). Introduction to principles of health fitness instruction for apparently healthy and medically stable asymptomatic populations in preparation for American College of Sports Medicine Exercise Leader- and Health/Fitness Instructor- certifications. *Variable hours of supervised laboratory/field experience will be required.* PREREQUISITES: EXSS 3503 and 3703.

3603. Physiological Bases of Strength Conditioning. (3). (PHED 3603). Study of anatomic and physiologic bases for the expression, development, and maintenance of muscular strength, power, and endurance, as well as various factors which may affect them. PREREQUISITES: BIQL 1751/1752 and 1761/ 1762.

3604. Teaching Exercise and Sport Science, K-Elementary. (2). (PHED 3604). Skills, activities, and resource materials for teaching elements of movement, educational games, educational gymnastics, and physical fitness to youth. COREQUISITE: EXSS 3605.

3605. Clinical Experience in Teaching Exercise and Sport Science, K-Elementary. (1). (PHED 3605). Observations and the teaching of mini-lessons in physical activity in an elementary school setting. COREQUISITE: EXSS 3604. S/U.

3703. Physiology of Exercise. (4). (PHED 3703). Scientific basis of physiological principles of various systems and organs of the body in response to muscular activity. Emphasis on principles of motor performance and training with appropriate laboratory experience. PREREQUISITES: BIQL 1751/1752 and 1761/1762.

3803. Motor Learning. (3). (PHED 3803). Theory and research concerning the psychological basis for understanding the process involved in motor skill learning and performance.

3903. Historical and Philosophical Aspects of Physical Activity. (3). (PHED 3903, 2903). Development of the discipline of physical education through historical, philosophical, sociological and scientific bases. PREREQUISITES: Upper division standing and satisfactory completion of the English composition requirements. **[W]**.

4002. Health Promotion Strategies. (3). Presentation and examination of health promotion strategies and programs that emphasize lifestyle behaviors that impact health and wellness.

4003. Health Program Development and Administration. (3). An overview of the principles of managing and directing health and exercise facilities. Topics include program planning and administration; facility design; staffing; business plans; and business structure. Course is based on American College of Sports Medicine facility management guidelines. PREREQUISITE: MKTG 3010.

4103. Critical Issues in Health. (3). (HLTH 4102). Critical and controversial issues of health explored. **[W]**. This course will not be offered after August 1999.

4182-6182. Health Aspects of Gerontology. (3). (HLTH 4182). Current issues and trends in gerontology on health and quality of life in the aging. *This course will not be offered after August 1999.*

4204. Assessment and Evaluation in Human Movement Sciences and Education. (3). (PHED 4204). Measurement techniques, tools, and resources and their application to assessment of physical performance and fitness factors. *Variable hours of supervised laboratory/field experience will be required.* PREREQUISITES: Upper division standing and satisfactory completion of the mathematics requirement. **[C]**.

4305. Problems in Exercise and Sport Science. (1-3). Independent study and/or research project on selected exercise and sport science problem, issue,

or concern. PREREQUISITE: Permission of instructor (S/U).

4403-6403. Kinesiology. (3). (PHED 4403, 3403). Analysis of bodily movements in terms of muscular forces operating on bones. PREREQUISITES; BIOL 1751/ 1752, BIOL 1761/1762 with a minimum grade of "C".

4406-6406. Electrophysiology and EKG Interpretation. (3). (PHED 4401). Introduction to electrophysiology of muscle cells; emphasis on cardiac muscle cells; mechanics and interpretation of EKG. *Variable hours of supervised laboratory/field experience will be required.*

4502. Advanced Prevention and Care of Athletic Injuries. (3). Advanced practical and theoretical aspects of treatment of athletic related injuries in athletic training programs with emphasis in supplies, management, organization, injury recognition, evaluation and assessment, therapeutic modalities, bandaging, and techniques in conditioning and rehabilitation. PREREQUISITE: EXSS 3502.

4602. Psychological Aspects of Exercise. (3). Emphasis on the application of psychological principles in fostering motivation among individuals in exercise/physical activity settings.

4603. Advanced Methods of Strength Conditioning. (3). An advanced study of training principles for strength and conditioning programs and their underlying physiological bases. PREREQUISITES: EXSS 3603 and EXSS 3703.

4605. Internship in Exercise and Sport Science. (3-9). (PHED 4605 and HLTH 4402). Culminating experience allowing students the opportunity to demonstrate knowledge and skills in an appropriate professional setting. PREREQUISITE: Completion of all course work in major and concentration. *This course may be taken to improve the grade for one, but not both, of the former courses.* COREQUISITE: HMSE 4999. S/U.

4703. Clinical Exercise Physiology. (3). Introduction to theoretical and functional techniques of graded exercise testing for functional and/or diagnostic assessment. *Variable hours of supervised laboratory/ field experience will be required.*

4705-11-6705-11. Special Topics Workshop in Exercise and Sport Science. (3). Selected phases of exercise and sport science through group study. In-depth study of area of interest and need for exercise and sport scientists. *May be repeated with a change in topic.*

4802. Environmental Health. (3). (HLTH 4802). Survey of complex association between environment and human productivity, health, and happiness. Environmental factors within general framework of ecological perspective in which interrelationship of all living things to one another affect human growth and well-being.

4808. Secondary Methods in Exercise and Sport Science. (2). (PHED 4808, 3808). Teaching strategies, management techniques, curricula planning, evaluation and research for effective teaching in grades 7-12. PREREQUISITES: EXSS 2002, 2003, and 2009, ICL 3000. COREQUISITE: EXSS 4809.

4809. Clinical Experience in Secondary Methods in Exercise and Sport Science. (1). (PHED 4809, 3809). Observation and teaching of mini-lessons in physical activity in a Jr./Sr. high school. COREQUISITE: EXSS 4808. S/U.

4902-11-6902-11. Special Topics in Exercise and Sport Science. (1-3). Current topics in exercise and sport science. *May be repeated with change in topic and content.* See *Schedule of Classes* for specific topics.

HUMAN MOVEMENT SCIENCES AND EDUCATION (HMSE)

1100. Concepts of Fitness and Wellness. (2). (HPER 1100). Emphasis on individual responsibility for achieving optimal well-being and preventive health practices that promote healthful lifestyles and reduce risk factors **[G]**.

2102. First Aid and CPR. (3). (SAFE 2102 & SAFE 3302, HLTH 2102). Safety skills and techniques of immediate and temporary care in the event of injury or sudden illness. Includes necessary training and skill for CPR certification. Successful completion qualifies the student for First Aid certificate endorsed by the American Red Cross. *This course may be taken to improve the grade for one, but not both, of the former courses.*

4999. Senior Project in Human Movement Sciences and Education. (3). (HPER 4999). Comprehensive final project demonstrating mastery of pedagogy and knowledge. Emphasis on independent work, class discussion and student project. Students will receive a letter grade or an in-progress grade. PREREQUISITES: Senior status and permission of instructor. This represents a culminating experience and can only be conducted when all other coursework is complete. COREQUISITE: SLS 4605. (A-F, IP). **[I]**.

HEALTH PROMOTION (HPRO)

4000-6000. Lifetime Wellness I. (3). (HLTH 4000). Concepts, applications and assessments for secondary teachers of Lifetime Wellness. Emphasis on personal fitness, disease prevention and nutrition.

4001-6001. Lifetime Wellness II. (3). (HLTH 4001). Concepts, applications and assessments for secondary teachers of Lifetime Wellness. Emphasis on mental health, safety and first aid, sexuality and family life, and substance use/abuse.

4401-6401. Death and Dying Education. (3). (HLTH 4203). An examination of dying and death phenomena via cognitive, affective, experiential and cultural perspectives.

4501-6501. Sexuality Education. (3). (HLTH 4204). Special study of selected phases of human sexuality.

4601-6601. Drug Education. (3). (HLTH 4205). Examines current issues concerning drug use and abuse including etiology, knowledge base, drug laws, and educational prevention approaches.

4602-6602. Organization and Administration in Public Health. (3). (HLTH 4602). Basic functions, principles, and procedures of organization and administration as applied to health. Emphasis on relationship and responsibilities of personnel in planning, promoting, improving, and evaluating total health activities in family-centered health services. *This course will not be offered after December 2001.*

PHYSICAL EDUCATION (PHED)

Required physical activity courses may be selected from the courses numbered 1000 through 1951. See Note 4 below for full listing of physical activity course options.

NOTE 1: The prerequisite for each advanced activity course is the introductory course or its equivalent.

NOTE 2: Any student except those with a major or minor in Physical Education has the option of taking these activity courses for a letter grade or on a credit/ no credit basis. Students majoring in the Fogleman College of Business and Economics should check with their advisor before registering on a credit/no credit basis.

NOTE 3: PHED 1001, 1003. 1004 and 1006 may be repeated once for credit. ALL other physical activity courses (1000-1951) may not be repeated unless title and content vary.

NOTE 4: The university general education fitness and wellness requirement, including approved physical activity courses, is as follows:

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821,1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501, AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

1001. Figure Control and Conditioning. (2). *May be repeated once for credit.* **[G]**.

1003. Aerobics. (2). *May be repented once for credit.* **[G]**.

1004. Jogging. (2). *May be repeated once for credit.* **[G]**.

1005. Conditioning for Varsity Sports. (2). (1001003). Open only to varsity athletes, cheerleaders, and members of the pom pom squad. *May be repeated once for credit.* **[G].**

1006. Water Aerobics. (2). *May be repeated once for credit.* **[G]**.

1007. Yoga, Stretching and Relaxation. (2). *May be repeated once for credit.* **[G]**.

1008. Walking for Health and Fitness (2). *May be repeated once for credit.* **[G]**.

1009. Fitness through Cross Training. (2). *May be repeated once for credit.* **[G]**.

1010-19. Selected Physical Education Activities. (1-3). Current activities in physical education. See *Schedule of Classes* for specific activity. *May be repeated with a change in topic.* **[G].**

1202. Juggling. (2). [G].

1301. Nautilus. (2). [G].

1302. Free Weights and Machines. (2). (1301001) [G].

1331. Camping. (2). [G].

1332. Advanced Camping. (2). [G].

1333. Backpacking.(2). (1331001).[G].

1334. Advanced Camping. Rock Climbing. (2). (1332001). [G].

1335. Advanced Camping. Caving. (2). (1332003). [G].

1340. Introduction to Fly Fishing. (2). [G].

1361. Horseback Riding. (2). (1361001). [G].

1412. Judo. (2). [G].

1413. Self Defense Techniques. (2). (1412001). [G].

1441. Karate. (2). [G].

1442. Advanced Karate. (2). [G].

1461. Fencing.(2). [G].

1462. Intermediate Foil Fencing. (2). [G].

1501. Tennis. (2). [G].

1502. Intermediate Tennis. (2). [G].

1503. Advanced Tennis. (2). (1502). [G].

1521. Racquetball. (2). [G].

1522. Intermediate Racquetball. (2). [G].

1523. Advanced Racquetball. (2). (1522). [G].

1531. Handball. (2). [G].

1541. Badminton. (2). [G].

1551. Archery. (2). [G].

1561. Bowling. (2). [G].

1562. Intermediate Bowling. (2). [G].

1571. Golf. (2). [G].

1572. Intermediate Golf. (2). (G].

1581. Recreational Games. (2). [G].

1624. Stunts and Tumbling. (2). (1621004). [G].

1711. Beginning Swimming I. (2). [G].

1712. Beginning Swimming II. (2). [G].

1713. Intermediate Swimming. (2). [G].

***1722. Swimming — Lifeguarding. (2). [G].**

***1741. Advanced Swimming. (2). (1741001). [G].**

1742. Conditioning Through Swimming. (2) (1741001). [G].

***1771. Scuba.(2). [G].**

***1772. Advanced Scuba. (2). [G].**

***1781. Boating and Small Craft. (2). [G].**

1782. Kayaking. (2). (1781001). [G].

1783. Canoeing. (2). (1781002). [G].

1811. Rhythms for Elementary School. (2). [G].

1812. Square and Round Dance. (2). American square, round and contra dance. **[G].**

1813. Folk and Social Dance. (2). International folk dance and American ballroom and social dance. **[G]**

1921. Basketball. (2). [G].

1923. Volleyball. (2). [G].

1924. Intermediate Volleyball. (2). [G].

1931. Soccer and Fieldsports. (2). [G].

1941. Track and Field Events. (2). [G].

*The prerequisite for these courses is Physical Education skills 1713.

RECREATION (RECR)

3102. Introduction to Therapeutic Recreation. (3). Theoretical and philosophical foundations of therapeutic recreation, history of therapeutic recreation, concerns of illness and disability, role of professional recreation therapist, and survey of thereapeutic recreation services and settings.

3202. Techniques of Therapeutic Recreation. (3). Basic therapeutic recreation methods emphasizing leadership and intervention techniques, assessment of client needs, activity analysis, program planning, and evaluative procedures. PREREQUISITES: BIQL 1731, 1732.

4102. Leisure Education for Recreation Therapy. (3). Leisure education as applied in recreation therapy settings. Analysis of groups served, programs offered, interagency coordination and general trends in the profession today.

4104. Leadership Seminar in Recreation. (3). Dynamics of leadership; theories, principles and practices of leadership; research in leadership, issues and problems of working with individuals and groups. *This course will not be offered after August 1999.*

SPORT AND LEISURE COMMERCE (SLC)

4102-11-6102-11. Special Topics Workshop in Sport and Leisure Commerce. (1-6). Selected phases of sport and leisure commerce through group study, in-depth study in area of interest and need for leaders in sport and leisure commerce. *May be repeated for credit when topic varies.*

4902-11-6902-11. Special Topics in Sport and Leisure Commerce (1-3). Current topics in sport and leisure commerce. *May be repeated with change in topic.* See *Schedule of Classes* for topic.

SPORT AND LEISURE STUDIES (SLS)

2105. Foundations of Sport and Leisure Studies. (3). (RECR 2105 and 3105). Explores and analyzes sport and leisure from philosophical, historical, and organizational perspectives. Prefatory work on professional development portfolio that addresses skills, knowledge, attitudes, and behaviors inherent to interrelated and diverse fields of sport and leisure studies. *This course may be taken to improve the grade for one, but not both, of the former courses.* COREQUISITE: SLS 2605.

2605. Field Experience in Sport and Leisure Studies. (1-3). Allows students entering Sport and Leisure Studies program early, supervised practical experiences in a variety of sport and leisure service areas. COREQUISITE: SLS 2105. S/U.

2703. Water Safety Instructor. (3). (PHED 2703/ SAFE 2703). Analysis, practice, and teaching of swimming and lifesaving skills and general water safety practice. *Variable hours of supervised laboratory/field experience will be required.* PREREQUISITE: PHED 1722.

3005. Computer Applications in Sport and Leisure. (3). (RECR 4505). History and application of computers and information systems. Emphasis on hardware and software relevant to sport and leisure programs as well as applications of common computer programs to specific leisure service and sport management situations.

3103. Outdoor Recreation and Education for Urban America. (3). (RECR 3103 and RECR 3605, 3705). Analysis of concepts and issues associated with outdoor recreation and education with an emphasis on urban citizen. Course focuses on outdoor recreation behavior in terms of individual dynamics of participation, resources for outdoor recreation, outdoor education, and outdoor leadership. Achieves balance among practical information, theory, and information from current research. *This course may be taken to improve the grade for one, but not both, of the former courses.*

3104. Urban Commercial Recreation and Travel Tourism. (3). (RECR 3104). Survey of urban commercial recreation with special emphasis on travel and tourism. Areas of study include sport and athletics, theaters, fitness centers, amusement and theme parks, aquatic areas, risk recreation, and historical areas, as well as the travel and tourism industry.

3105. Popular Physical Culture in Contemporary America. (3). (PHED 3307, 2101). Various interpretive methods used to analyze critically production and consumption of popular physical culture within contemporary America. Focus on formations, representations, and spectacles of physical culture, and their mutually reinforcing relationship with post-industrial, post-modern, and [trans]national impulses which drive America's promotional economy.

3202. Park and Recreation Resource Management. (3). (RECR 3203, 3405). Management, operation, and maintenance of areas and facilities within field of recreation and parks; identification, acquisition, allocation, development, and management of land and water resources through environmentally sound techniques.

3204. Advanced Analysis of Sport and Leisure Organizations. (3). (PHED 4503 and RECR 4405). Analysis of the organization and administration of sport and leisure service organizations. Students will study organizational structuring: goals, objectives, and policy development; planning process; personnel development; risk management conflict resolution as applied to sport and leisure services. Topics build upon theories of organization covered in course's prerequisite. *This course may be taken to improve the grade for one, but not both, of the former courses.* PREREQUISITE: MGMT 3110.

3205. Planning Sport and Leisure Areas and Facilities. (3). (PHED 4613 and RECR 3205). Planning, development, and maintenance of sport and leisure facilities. Includes inspection, comprehensive recreation surveys, and planning a layout. This course may be taken to improve the grade for one, but not both, of the former courses.

3305. Sport and Leisure Program Development. (3). (RECR 3305). Planning techniques in regard to citizen surveys, sport and leisure needs analysis, sport and leisure activity selection, and sport and leisure program design, promotion, and evaluation.

3406. Lifeguarding and Pool Management. (2). (PHED 3406, SAFE 3406). Theory and application of lifeguarding skills, pool management, records/reports and pool maintenance and sanitation. PREREQUISITES: PHED 1722 or Red Cross Lifesaving certificate; HMSE 2102 or Red Cross or Heart Association CPR/Basic Life Support.

3600. Event Management in Sport. (3). Basic concepts pertaining to the production of sporting events, both amateur and professional. Topics include planning, organizing, publicizing, and conducting an event. PREREQUISITES: SLS 2105, 3205, and 3305.

3605. Resource Planning and Management in Sport. (3). Basic finance and accounting applied to managerial control of sport organizations. Topics include feasibility analysis, formulation and development of operating budgets, financial forecasting, ownership models, taxation issues, and revenue production. PREREQUISITES: SLS 2105.

3650. Sport Information and Public Relations. (3). Basic knowledge and understanding of media relations in both amateur and professional sport. Special emphasis is placed on building and maintaining an effective media relations program. Course includes writing for media, public relations, and business communications. PREREQUISITES: JQUR 2121, 3400; SLS 2105.

3905. Sport and Leisure for Special Populations. (3). (RECR 3905). Examination of role of sport and leisure for persons with special needs including individuals with physical, emotional, mental, and social disabilities. Multicultural considerations such as race, ethnicity, gender, socioeconomic status, and age will also be examined.

4001. Park and Recreation Visitor Management. (3). (RECR 4001 and 4002). Visitor management as it relates to design and management of visitor interpretive and educational services. Addresses both attended and unattended services including interpretive talks, living interpretation, audio devices, self-guided tours, exhibits, and educational publications. *This course may be taken to improve the grade for one, but not both, of the former courses.*

4005. Promotional Techniques for Leisure Services. (3). Applied promotional principles and techniques to recreation, parks, and leisure service related agencies. PREREQUISITES: COMM 3802; JQUR 3400; MKTG 3010; and SLS 3005.

4103. Camp Administration, Counseling and Programming. (3). (RECR 4103, 3505). History, administration, organization and operation of organized camping programs; emphasis on program planning, camp administration, staff selection, training and camp counseling techniques as practiced today.

4105. Leadership in Leisure Services. (3). (RECR 4105). Concepts of leisure leadership through group discussion, activity, role playing, gaming, lecture, and class projects. Culminates professional development portfolio of SLS 2105. Students unable to complete professional development portfolio while enrolled in this class will receive (IP) grades. PREREQUISITE: SLS 2105 or permission of the instructor. **(A-F, IP).**

4125. Gender, Race, and Class Considerations in Urban Sport and Leisure. (3). Socially constructed categories of class, race, and gender, and their influence on perceptions of the body. Way these categories shape institutionalization, practice, and representation of sport and leisure is discussed with an emphasis on promoting unbiased and non-prejudicial sport and leisure cultures. PREREQUISITE: SLS 3105 or permission of the instructor.

4135. Sport, Leisure, and Popular Culture in Cross-Cultural Perspective. (3). Nature, meaning, and significance of sport, leisure, and popular culture across selected nations. Identification and systematic analysis of persistent problems in American sport, leisure and popular culture as well as cultural interstices in emerging global village (including cultural conflict, cultural resistance, and cultural imperialism). PREREQUISITES: Social Sciences requirement, SLS 3105, or permission of instructor.

4145. The Cultural Formation of Sport in Urban America. (3). (PHED 3903). Sociocultural foundations of American sport in urban environment. Reciprocal relationship between sport, urban structure and process explored in context of industrial, modern, and postmodern American city. Topics include sport in relationship to walking city; radial city; suburban city; cause or panacea for urban ills; community cohesion, and urban identity; urban politics; capitalism, and city taxpayer; economic impact on the city; and, urban renewal. PREREQUISITES: HIST 2602, SLS 3105, or permission of instructor.

4155. Problems in Urban Sport. (3). Analysis of causes and consequences of contemporary problems in urban sport. Case-study approach used to examine social, political, and economic factors influencing structure and experience of sport in American cities. Emphasis on formulating solutions and potential strategies to address identified problems. Culminates professional development portfolio of SLS 2105. *Students unable to complete their professional development portfolio while enrolled in this class will receive IP grades.* PREREQUISITES: SLS 2105, 3105, 4145, or permission of instructor. **(A-F, IP).**

4203. Aquatic Administration. (2). (RECR 4203). Administration and management of aquatic programs; emphasizes organization and direction of aquatic programs in recreational and educational environments.

4205. Ethical and Regulatory Aspects of Sport and Leisure. (3). (RECR 3204). Legal and statutory regulations relevant to sport and leisure programs in urban context. Emphasis placed on promotion of ethical decision-making and practices in field of sport and leisure. Topics include: developing statement of principles/values, and code of ethics; identification and compliance with relevant legal and statutory regulations; contracts; trademarks, licensing, and copyright. PREREQUISITE: Historical/Philosophical Heritage requirement, SLS 3204, 3305, or permission of instructor.

4305. Problems in Sport and Leisure Studies. (1-3). Independent study and/or research project on a

selected sport and leisure problem, issue, or concern. PREREQUISITE: Permission of instructor.

4500. Promotional Techniques in Urban Sport. (3). Basic marketing concepts with applications to urban sport organizations, both amateur and professional. Topics include urban sport consumer behavior, strategic market planning, marketing mix, component integration, and market information management. PREREQUISITES: JOUR 2121, 3400; MKTG 3010; SLS 2105, and 3105.

4605. Internship in Sport and Leisure Studies. (3-9). (PHED 4605/RECR 4605). Culminating experience allowing students the opportunity to demonstrate knowledge and skills in an appropriate professional setting based upon their training and experience. Represents a culminating experience and can only be conducted when all other coursework is complete. PREREQUISITES: Senior status and permission of instructor. COREQUISITE: HMSE 4999. S/U.

INSTRUCTION AND CURRICULUM LEADERSHIP

PROFESSOR
JOHN W. SCHIFANI, Ed.D., *Interim Chair*
Room 106D, College of Education Building
http://www.coe.memphis.edu/coe/ICL/icl.html

Changes in teacher licensure requirements are being proposed by the State Board of Education effective for all students entering Fall 1999, thus teacher licensure programs will change in response to these mandates. The catalog validity date will correspond to the fall term in which the changes are implemented.

EARLY CHILDHOOD EDUCATION (ECED)

3555. Observation and Assessment of Infant and Early Childhood Development. (3). Developmental perspective on measurement and evaluation in early childhood years. Considers standardized tests, observations, checklists and rating scales, and tests designed by teachers; their advantages and disadvantages for use with young children; and professional ethical issues pertaining to evaluating young children. PREREQUISITES: EDPR 2111, and admission to TEP. PREREQUISITES or COREQUISITES: Two of the following: EDPR 3300, 3301, 4301. **[C]**.

3565. Development of Play in Early Childhood. (3). Role of play in early childhood development and learning from birth through age eight; applications of play theory to young children's total development and learning; and study of play environments and adult roles in supporting appropriate play activities and environments. PREREQUISITES: EDPR 2111, and admission to TEP. PREREQUISITES or COREQUISITES: Two of the following: EDPR 3300, 3301, 4301.

4107-6107. Workshop in Montessori Instruction. (3). (ICL, CIED). Basic principles of how children learn, how they should be taught, what didactic materials should be presented, how the classroom is prepared, and in which sequence didactic materials should be taught using Maria Montessori's philosophies.

4510-6510. Early Childhood Programs and Practices. (3). Applying professional knowledge to early childhood education values and principles, programs and practices, issues, problems, and trends; and exploring early childhood teacher roles and responsibilities through observations in multi-cultural early childhood program settings. **(Sp)**. PREREQUISITES: EDPR 2111, 3300, 3301 or 4301 and admission to TEP. COREQUISITE: ECED 4520.

4520-6520. Planning and Facilitating Social Learning and Development. (3). Focus on planning, implementing, and evaluating programs to facilitate young children's social learning and development from birth through age 8. Socialization and social science skills, knowledge, and dispositions addressed in context of integrating instruction and learning with children's literature, art, music, mathematics, science, etc. **(Sp)**. PREREQUISITE: TEP admission. COREQUISITE: ECED 4510.

4530-6530. Planning and Facilitating Math and Science Learning and Development. (3). Knowledge skills and dispositions necessary to plan for and facilitate development and learning of physical, logico-mathematical, and social knowledge of mathematics and science for children from birth through eight years. **(F)**. PREREQUISITES: ECED 3555, 3565, 4510, 4520 and admission to TEP.

4540-6540. Planning and Facilitating Infant and Toddler Development. (3). Models, principles, curriculum and practices of developmentally appropriate infant toddler care giving; emphasis on teacher's knowledge, skills and dispositions necessary to plan and facilitate development of infants and toddlers in group care settings. **(F)**. PREREQUISITES: ECED 3555, 3565, 4510, 4520 and admission to TEP.

ELEMENTARY EDUCATION (ELED)

3251. Teaching Methods in the Sciences: Mathematics. (3). Curriculum methods and materials for teaching mathematics with emphasis on problem solving. PREREQUISITE: admission to TEP. **[C]**.

3261. Teaching Methods in the Sciences: Science. (3). Principles, techniques and materials for teaching relationships among science, technology, and society. PREREQUISITE: admission to TEP

3271. Teaching Methods in the Sciences: Social Studies. (3). Curriculum, methods and materials for teaching social studies and global education to elementary school students. PREREQUISITE: admission to TEP.

4242. Literacy and Language. (ELED 3241 and 4242). (6). Includes scope and sequence of skills assessment, organization strategies, materials and methods of listening, speaking, writing and reading for preschool and primary grade students. Interrelatedness of these skills stressed through activities which teach children of all cultures to think and communicate. PREREQUISITE: admission to TEP. **[W]**.

4243. Corrective Reading. (2). Diagnostic and prescriptive approaches for assessment and correction of reading and reading-related processes needed for learning. Clinical experience required. PREREQUISITES: ELED 4242.

4344. Literacy in the Middle Grades. (3). Instructional strategies and assessment procedures relevant to the acquisition of reading, speaking, listening, writing and thinking skills for students in the middle grades. PREREQUISITE: ELED 4242.

INSTRUCTION AND CURRICULUM LEADERSHIP (ICL)

0555. Test Taking Skills. (3). (CIED). Educational principles, strategies, and techniques designed to enhance individual test taking skills. Emphasis on preparation for the National Teacher's Exam (NTE). *This course will not count in any degree program.* (S/U).

2601. Clinical Experience. (1). (EDUC). Observation and participation in educational settings; emphasis on how teachers utilize developmental concepts and principles of learning with students. COREQUISITE: LEAD 2010.

3000. Principles of Teaching. (3). (EDUC). Research practices and application of principles of instruction that promote effective teaching and facilitate cognition. PREREQUISITES: EDPR 2111, LEAD 2010.

3501. Classroom Management. (3). (EDUC). Utilization of appropriate knowledge and skills for managing total classroom environment; emphasis on development of skills that facilitate effective teaching through constructive management techniques.

3511. School and Community Relations.(3) (CIED 3511, ELED 4411). Development of strategies for communicating with and involving parents and community members in school activities and student learning.

3600. Applications of Instructional Media. (3). (EDUC). Preparation and use of instructional media in school and training settings, including audiovisuals, television and microcomputer applications in instruction.

3900. Education Honors Program Colloquium. (3). (EDUC). Interdisciplinary colloquium on a broad education theme or topic. PREREQUISITES: junior standing and permission of the Education Honors Council.

3901. Special Problems in Instruction. (1-6). (CIED). Supervised individual investigation in area of instruction. PREREQUISITE: experience as teacher or satisfactory evidence of being qualified to benefit from course.

4111-6111. Library Materials for Children. (3). (CIED, LIBS 4111). Evaluation and selection of books and related library materials for leisure interests and curriculum needs of elementary school children; extensive reading, introduction to selection criteria, bibliographic aids, authors and illustrators and types of literature and information books.

4121-6121. Library Materials for Young People and Adults. (3). (CIED, LIBS 4121). Evaluation and selection of books and related library materials for leisure interests and curriculum needs of young people and adults from junior high school up; extensive reading, introduction to selection criteria, bibliographic aids, authors and illustrators, and types of literature and information books.

4450. Individualized Instruction Practicum. (1-3). (CIED). Implementation of instruction in individual and small group situations for learners experiencing difficulty in selected basic skills areas; requires design and delivery of tutorial type instruction under guidance of supervisory personnel. Repeatable to maximum of 9 semester hours. (S/U).

4601-6601. Workshop in Curriculum and Instructional Leadership_Environmental Education (3). (CIED). Current, relevant environmental issues with emphasis on resources and appropriate strategies for application of knowledge.

4701-09-6701-09. Workshops in Curriculum and Instructional Leadership. (1-9). (CIED). Various areas of curriculum and elements of instruction explored. Active student participation included. See *Schedule of Classes* for specific workshop number and topic. Repeatable for maximum of 9 semester hours in any one topic. (S/U).

4715. Clinical/Practicum. (2). (EDUC 4701). Seminars and participation as assistant to classroom teacher; emphasis on teacher roles and on adapting subject discipline to school curriculum. PREREQUISITES: EDPR 2211; LEAD 2010. (S/U).

4761-6761. Aerospace Education in Schools (3). (CIED). Aerospace content and flight experiences. Emphasizes classroom application.

4762-6762. Advanced Aerospace Education in Schools. (3). Theory, principles and practices related to historical development of aerospace; emphasis on both civilian and military uses of aerospace capabilities. Appropriate utilization of aerospace research, concepts, and "spinoffs" for instructional purposes in the classroom at all grade levels. PREREQUISITE: ICL 4761.

4800. Professional Seminar. (3). (CIED). Senior seminar taken concurrently with student teaching which requires students to analyze and seek solutions to problems encountered in current practices and issues in education. Students draw upon each specialization within discipline to integrate and synthesize knowledge and experience in development of their roles as professional educational leaders. COREQUISITE: student teaching. **[I]**.

4901-4919. Student Teaching. (2-10). Full-time planned and supervised experience in a setting appropriate to student's area of specialization providing opportunities to synthesize knowledge and skills and demonstrate professional competencies in educational setting. PREREQUISITE: approval from Teacher Education Director. COREQUISITE: ICL 4800. (S/U).

4901. Student Teaching in Kindergarten. (EDUC 4901-002). (SIU).

4902. Student Teaching in Primary Grades. (S/U).

4903. Student Teaching in Preschool. (S/U).

4904. Student Teaching in Grades 1-8. (EDUC 4901-001). (S/U).

4905. Student Teaching in Special Education: Modified. (EDUC 4901-003). (S/U).

4906. Student Teaching in Special Education: Comprehensive. (S/U).

4907. Student Teaching in Secondary School. (EDUC 4901-004). (S/U).

4908. Student Teaching in Health. (EDUC 4901-008). (S/U).

4909. Student Teaching in Exercise Science and Education. (EDUC 4901-012). (S/U).

4910. Student Teaching in Vocational Home Economics. (EDUC 4901-013). (S/U).

4911. Student Teaching in Music. (S/U).

4912. Student Teaching in Art. (EDUC 4901-005). (S/U).

4950-59-6950-59. Special Topics in Instruction and Curriculum Leadership. (1-3). (CIED). Current topics in areas of curriculum and instruction at all levels. See *Schedule of Classes* for special topic.

4960. Academic Content for Teaching. (1-9). (ICL 5501). Academic content areas in disciplines supportive of school curriculum. *May be repeated to remove deficits for teacher licensure and with change of content.* (F, Sp).

SPECIAL EDUCATION (SPED)

2000. Introduction to Exceptional Learners. (3). (SPER). Overview of special education including historical and legal perspectives of the field, characteristics of each exceptionality, and educational and community services utilized by exceptional persons and their families. *Field experience included.*

3002. Independent Study in Special Education. (1-6). (SPER). Qpportunity for self-directed study and/or research under supervision. PREREQUISITE: consent of department.

3201. Students with Emotional Problems. (3). (SPER). Study of identification and education of students considered emotionally disturbed. Mild to severe behavioral and psychological characteristics and appropriate educational placement alternatives and practices emphasized. *Practicum with students with emotional disturbance included.* PREREQUISITE: SPED 2000.

3401. Students with Learning Disabilities. (3). (SPER). Historical developments and current practices in identification, assessment and instruction of students with learning disabilities. Emphasis on diagnosis, characteristics, and major approaches to instructional methodology. *Practicum with students with learning disabilities included.* PREREQUISITE: SPED 2000.

3501. Nature of Students with Mental Retardation. (3). (SPER). Definitions, etiology, and characteristics associated with mental retardation. Examination of evaluation, placement and programming used in educational, prevocational, and transitional settings. *Practicum with students with mental retardation included.* PREREQUISITE: SPED 2000.

3601. Students with Physical/Health Impairments. (3). Etiology and characteristics of students having mild to severe physical/health impairments. Emphasis on physical and educational modification used to facilitate learning and developing vocational skills. Accessibility, movement patterns, prosthetic and augmentative communication devices and supportive medical procedures examined. *Practicum with students with physical/health impairments included.* PREREQUISITE: SPED 2000.

NOTE: SPED 3800, 3801, 3802, and 3803 must be taken as corequisites. The prerequisites for this sequence are SPED 2000, 3201, 3401, 3501, 3601; ELED 3251, 4242; and admission to TEP.

3800. Methods, Materials and Curriculum for Learners with Mild Disabilities. (3). (3012). Curriculum, methods, and materials applicable to special educational needs of learners with mild disabilities in primary, intermediate and secondary levels. Emphasis on programming techniques and implementation of appropriate interventions in special education or regular settings CO/PREREQUISITES: See NOTE above.

3801. Practicum with Learners Having Mild Disabilities. (3). (3013). Planning and implementation of special education methods and materials with learners having mild disabilities CQ/PREREQUISITES: See NQTE above. (S/U)

3802. Assessment of Learners with Disabilities. (3). (3014). Tests and measurements used with learners having disabilities. Focus on diagnostic achievement testing as related to instructional planning. Includes other major assessment instruments and procedures used in evaluation of mild to severe exceptionalities. CQ/PREREQUISITES: See NOTE above.

3803. Behavior Management for Learners with Disabilities. (3). (3015). Advanced strategies for managing social behaviors of learners with mild to severe disabilities. Techniques for eliminating maladaptive behaviors, managing aggressive and antisocial students, and teaching appropriate social skills. CO/PREREQUISITES: See NOTE above.

4000. Methods, Materials and Curriculum for Learners with Moderate/Severe Disabilities. (3). Curriculum, methods, and materials applicable to special educational needs of learners with moderate to severe disabilities. Emphasis on educational and vocational skills that facilitate normalization and independent living. PREREQUISITES: SPED 3800, 3801. CQREQUISITE: SPED 4001.

4001. Practicum with Learners Having Moderate/Severe Disabilities. (3). (4013). Planning and implementation of special education methods and materials with learners having moderate to severe disabilities. PREREQUISITES: SPED 3800, 3801. COREQUISITE: SPED 4000. (S/U).

4002. Professional Seminar in Special Education. (3). (SPER). Professional development issues including development of communication skills affecting educator interaction with students, parents, and other professionals. Emphasis on addressing concerns and questions arising in student teaching settings. PREREQUISITES: SPED 3800, 3801. CQREQUISITE: 4901.

4101-10. Speclal Topics in Special Education. (1-3). Investigation in selected areas of special education. Topics are varied and announced in the *Schedule of Classes.*

4801-10-6801-10. Workshop in Special Education (1-9). For professionals in field of special education. Intensive examination of current methodologies, research, issues and trends in various areas of exceptionalities. See *Schedule of Classes* for specific workshop title.

4900. Consultation with School/Family/Community. (3). Professional development issues which impact on educator interaction with students, parents and other professionals, including the development of communication and consultation skills. Practicum included.

EDUCATIONAL SERVICES (EDSV)

3350. The Adult Learner. (3). (EDUC). Variety of learning patterns and developmental characteristics of adults; emphasis on applications in programs or other activities for adult learners.

4350-6350. Instructional Development for Training. (3). (EDUC). Instructional development techniques and applications in training settings; principles of curriculum development, instructional delivery, and evaluation.

4450-6450. Media Development for Training. (2). (EDUC). Practical preparation of audiovisual material for training, applying instructional design techniques; development of media presentation skills. PREREQUISITE: EDSV 4350 or permission of instructor.

4550-6550. Organization and Management of Training Programs. (3). (EDUC). Development and management of instructional programs in non-school settings; focus on goals, personnel, operational, and budgetary considerations. PREREQUISITE: MGMT 3110.

4750. Special Problems: Educational Services. (1-3). (EDUC). Independent study and field projects on selected problems, interests, and needs related to educational programs in training settings.

4800. Professional Seminar. (1). (EDUC). Extension of student's professional preparation through a series of required and elective activities: exploration of issues and topics related to professional development. Serves as a capstone experience for synthesizing the student's professional preparation program. CQREQUISITE: EDSV 4950. (S/U).

4850. Practicum in Training Settings. (1-3). (EDUC). Qpportunities to gain experience in a variety of settings; tailored to interests, needs and career pathways of student. PREREQUISITE: approval by program coordinator. (S/U).

4950. Internship in Training Settings. (3-12). Planned and supervised full-time experience in a training setting appropriate to the student's specialization area; opportunities to synthesize knowledge and skills and demonstrate professional competencies in an appropriate setting. PREREQUISITE: approval in advance by program director. COREQUISITE: EDSV 4800. (S/U).

LEADERSHIP

PROFESSOR

JOHN R. PETRY, Ed.D., *Interim Chair*

Room 113, Patterson Hall

http://www.coe.memphis.edu/coe/LEAD/leadership.html

The Department of Leadership offers only graduate level degree programs but does provide courses as part of undergraduate degree programs offered by other departments in the college and university.

LEADERSHIP (LEAD)

2010. Teaching and Schools in Urban Settings. (3). (EDUC 4601). Introduction to roles and responsibilities of teachers in urban school settings; evolution of educational policies and practices; organization and structure of schools; examination of schools as cultural systems; philosophical, historical, and legal approaches. PREREQUISITE: sophomore standing.

4000-6000. Foundational Studies: Education, Schooling and American Society. (3). Interdisciplinary study of educational policies and practices in American society; role and function of school and teachers; analysis of major problems and issues facing contemporary public education. PREREQUISITE: upper division standing or bachelor's degree.

4400-6400. Leadership and Reform in American Schools. (3). Concepts of leadership in reform context of contemporary social and educational policy; examination of major legal, political, economic, organizational, and philosophical issues; role of teacher-leader explored. PREREQUISITES: senior standing and LEAD 2010.

The Herff College of Engineering

RICHARD C. WARDER, JR., Ph.D., *Dean*
Room 201-D, Engineering Building
http://bmell.bme.memphis.edu/~neyens/frame/frame.html

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
Civil Engineering	Civil Engineering*	(1) Construction Engineering (2) Environmental Engineering (3) Foundation Engineering (4) Structural Engineering (5) Transportation Engineering	Bachelor of Science in Civil Engineering (B.S.C.E.)
	Industrial and Systems Engineering		Bachelor of Science in Industrial and Systems Engineering (B.S.E.E.)
Electrical Engineering	Electrical Engineering*	(1) Computer Engineering (2) Electrophysics (3) Systems and Signals	Bachelor of Science in Electrical Engineering (B.S.E.E.)
Mechanical Engineering	Mechanical Engineering*	(1) Mechanical Systems (2) Energy Systems (3) Biomedical Systems	Bachelor of Science in Mechanical Engineering (B.S.M.E.)
Engineering Technology	Architectural Technology†		Bachelor of Science in Engineering Technology (B.S.E.T.)
	Computer Engineering Technology†		
	Electronics Engineering Technology†		
	Manufacturing Engineering Technology†		

* Note. Accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).
† Note: Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Individual program requirements described in the *Undergraduate Issue of the 1997-1999 Bulletin of The University of Memphis* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this bulletin; or consult the undergraduate bulletin website at: http://www.memphis.edu for the latest catalog updates.

PURPOSES

The college's function is to serve the educational and research needs of the industrial community, the metropolitan area, the state, and the nation. It accomplishes this function by providing:
(1) undergraduate professional education in the principal fields of engineering, (2) undergraduate education in both technical and educational technology, (3) graduate education in all areas, (4) a program of continuing education for the engineering and technological practitioners of the area, (5) assistance in the solution of industrial problems through utilization of physical facilities and the professional talents of faculty and students, (6) a forum for the interchange of ideas and experiences among members of the industrial community through conferences, institutes and short courses and (7) an increase in the accumulation of knowledge in special fields of interest by a continuing program of study and research.

ORGANIZATION

The Herff College of Engineering is organized into the Departments of Biomedical, Civil, Electrical, Mechanical Engineering and Engineering Technology. Except for biomedical engineering, each offers a choice of specialized four-year programs leading to baccalaureate degrees. Graduate master's or doctoral programs are offered in all of the engineering disciplines above. Students may also pursue the master's degree in Industrial and Systems Engineering and in Technical Education.

Advising

High school students, in planning for careers in one of the fields of engineering, should take advantage of preparatory courses. Since engineering is the application of mathematics and physical sciences to imaginative and useful systems, those courses should be emphasized in high school preparation. Courses are available at the university for those not fully prepared. Early enrollment in the summer terms offers excellent opportunity to remove any deficiencies that may exist.

Freshman students who choose to study in The Herff College of Engineering will be advised by an Engineering College counselor until a major has been selected; then they will be advised by a member of their major department. Internal changes of a student's major may be made efficiently without loss of academic credit.

Many students have found that the study of engineering is an excellent preparation for medical school. Those students electing this option should consult the advisor for the College of Engineering. Those courses in biology and chemistry which are necessary for the pre-med option may be used as electives in the engineering curricula. However, the student is advised to secure permission to do so before enrolling for the courses. The student should also see the university pre-professional advisor in the dean's office in the college of Arts and Sciences.

DEGREE REQUIREMENTS

Degrees Offered

The Herff College of Engineering offers work leading to the following degrees: Bachelor of Science in Civil Engineering, Bachelor of Science in Industrial and Systems Engineering, Bachelor of Science in Electrical Engineering, Bachelor of Science in Mechanical Engineering, and Bachelor of Science in Engineering Technology.

The college also offers masters' degrees in these areas as well as a Ph.D. degree in Engineering. For more information about graduate programs, refer to the Graduate School *Catalog*.

The required curriculum, including elective specialties in each of the various undergraduate programs, is described in detail in the following pages. A minimum grade point average of 2.0 is required for graduation. A maximum of 2 semester hours of physical activity course credit may be applied to the degree.

Students who desire to take courses offered by other institutions and receive transfer credit at The University of Memphis, must secure the permission of the dean's office before enrolling in the courses.

University residence requirements are explained in detail in the *Graduation from the University* section. A student in the Herff College of Engineering must earn the 33 hours required by the university for residency as upper division hours in courses in the Herff College of Engineering.

The university computer literacy requirement is met by a combination of introductory and specialized courses, complemented by advanced classroom assignments, in each major program of the College of Engineering. Specific requirements may be found in the following degree descriptions.

Bachelor of Science in Civil Engineering

The civil engineering program is designed to equip students with the knowledge and skills required to identify and solve the technical problems of society in a practical and ethical way. The program objectives are to (1) produce civil engineers who can assume technical and managerial leadership roles in the planning, design, construction, operation, and maintenance of our nation's infrastructure; (2) provide lifelong learning opportunities for civil engineering practitioners in the region; and (3) assist local government and industry in the solution of their technical problems while providing practical experience for our students. The civil engineering program is greatly enhanced by a diverse student body spanning a wide range of ages, backgrounds, and nationalities.

The civil engineering program of study provides an integrated educational experience that combines study in basic and engineering science, the humanities, and the social sciences with practical experience in laboratory experimentation, problem solving, and engineering design. Students may pursue a general course of study or may elect to specialize in water resources or one of the following concentrations; environmental, structural, foundation, transportation, or construction engineering.

GRADUATION: To qualify for the degree of Bachelor of Science in Civil Engineering, a student must satisfy general university and college requirements, have a grade of "C" or higher in all civil engineering courses that are applied toward the degree, and complete the course sequence outlined below. For credits transferred from another institution, only those civil engineering course grades of "C" or higher may be applied toward the degree.

COURSE ENROLLMENT: The degree program in civil engineering includes a series of engineering science and professional courses taught at the upper division level. These courses are based on a background of communications, physical science, mathematics, and engineering science courses required during the freshman and sophomore years. All of the courses required during the freshman and sophomore years are prerequisites to junior standing in the Civil Engineering Department. Students shall not enroll in any upper division courses in civil engineering before the semester in which they complete all of the lower division requirements. Exceptions to this policy can be made only by the department chair acting upon the recommendation of the student's advisor.

GENERAL EDUCATION AND B.S.C.E. REQUIREMENTS: (62-72 hours)

English Composition (6 hours): ENGL 1101-1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): ENGL 3603.

Mathematics (15-19 hours) including 15 hours in the following courses: MATH 1321(4), 2321(4), 2322 (4), and 3391. **NOTE:** *Students who have not had MATH 1213 or its equivalent must take it before enrolling in MATH 1321.*

Literary Heritage (3 hours): ENGL 2201 *or* 2202.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 4260, PHIL 3411, PHIL 3512, POLS 3402, UNIV 2860, 3581. **NOTE:** *Courses need to be selected that provide both breadth and depth and not be limited to a selection of unrelated introductory courses. In order to meet this requirement, the selection of these courses must be approved by the department chair or the chair's designee.*

American Heritage (6 hours): HIST 2601 *or* 2602; plus one other course from the following. ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422. **NOTE:** *Students who completed one unit of American History in high school and who complete the B.S.C.E. degree requirements are exempt from this requirement.*

Social Science (6 hours): ECON 2110 and one *of* the following: ANTH 1100, ANTH 1200, CJUS 1100, CJUS 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 2301, POLS 2501, PSYC 1101, PSYC 2201, SOCI 1111, SOCI 2100, SOCI 2101/ CSED 2101, UNIV 2304.

Natural Science (16 hours): CHEM 1121, 1131; PHYS 2003, 2004, 2510, 2520 and one of the following: CHEM 1122 and 1132, BIOL 1151 and 1152, or GEOL 1101.

Fitness and Wellness: (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 *and* 2204 *or* 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

Collateral Courses: ELEC 2283 or MECH 3311; MECH 2308, 2332(9). (12)

The following courses and hours are included in the description of the major found below:

Computation Intensive [C]: CIVL 3121.

Writing Intensive [W]: CIVL 4199.

Integrative [I]: CIVL 4199.

Computer Literacy: CIVL 1112 and 2107.

The Major: See description below. (62)

TOTAL HOURS (133-143)

CIVIL ENGINEERING

The Major: 62 semester hours including CIVL 1101, 1112, 2107, 2131, 3113, 3121 **[C]**, 3131, 3137(2), 3140, 4151, 3161, 3180, 3182 (1), 3322, 3325 (1), 4111, 4193 (1), 4199 **[W, I]**; plus 15 hours of civil engineering electives approved by an advisor and selected as follows: 6 hours from group 1 electives CIVL 3101, 3181, 4112, 4122, 4143, 4171, 4172, 4173, and an approved upper-division civil, electrical, *or* mechanical engineering course; 9 hours from group 2 electives CIVL 4131, 4135, 4136, 4140, 4144, 4152, 4162, 4163, 4164, 4180, 4190, 4191, and 4900-10. A student may select courses from the following concentrations to satisfy civil engineering elective requirements. If the student declares a concentration, a minimum of 9 hours from that concentration area is required.

a. **Environmental Engineering:** CIVL 4140, 4143, 4144, 4180, 4191

b. **Foundation Engineering:** CIVL 4152, 4171, 4191

c. **Structural Engineering**: CIVL 4131, 4136, 4152, 4191, 4122

d. **Transportation Engineering:** CIVL 4162, 4163, 4164, 4191

e. **Construction Engineering:** CIVIL 4164, 4171, 4172, 4173, 4191

TYPICAL SEQUENCE

FRESHMAN YEAR			
ENGL 1101	3	ENGL 1102	3
MATH 1321	4	MATH 2321	4
CIVL 1101	3	CIVL 1112	3
Physical Activity	2	PHYS 2003/2510	4
CHEM 1121/1131	4	Physical Science[1]	4
	16		18

SOPHOMORE YEAR			
ENGL 2201 *or* 2202	3	MECH 2308	3
MATH 2322	4	HMSE 1100	2
PHYS 2004/2520	4	ELEC *or* MECH[2]	3
CIVL 2107	3	ECON 2110	3
CIVL 2131	3	MECH 2332	3
		Gen. Ed. (Social Science)	3
	17		17

JUNIOR YEAR			
MATH 3391	3	CIVL 3131	3
CIVL 3322/3325	4	CIVL 3161	3
CIVL 3180	3	CIVL 3113	3
CIVL 3121 **[C]**	3	CIVL 3140	3
Gen. Ed. (Hist/Phil: pre-1500)[3]	3	ENGL 3603	3
		CIVL 3137	2
		CIVL 3182	1
	16		18

SENIOR YEAR			
CIVL Elective (Grp 1)[4]	3	CIVL 4111	3
CIVL 4151	3	CIVL 4199 **[W, I]**	3
CIVL Elective (Grp 1)[4]	3	CIVL Elective (Grp 2)[4]	3
CIVL Elective (Grp 2)[4]	3	CIVL Elective (Grp 2)[4]	3
Gen. Ed. (Fine Arts)	3	Gen. Ed. (Hist/Phil: post-1500)[3]	3
		CIVL 4193	1
	15		16

[1]Select from CHEM 1122/1132, BIOL 1151/1152, GEOL 1101, and GEOL 1103

[2]Select from ELEC 2283 and MECH 3311

[3]In addition to meeting the university General Education requirements, this course must be used to fulfill part of the engineering humanities and social sciences requirement. The combination must include a sequence of courses that reflects both breadth and depth in a particular area. Chair's approval required.

[4]Upper division course in civil engineering; advisor's approval required.

Bachelor of Science in Industrial and Systems Engineering

The Bachelor of Science in Industrial and Systems Engineering is offered through the Department of Civil Engineering.

The goals of the Industrial and Systems Engineering Program are: (1) to provide a curriculum and an environment that challenge students' problem solving skills; (2) to provide a program that explicitly considers the needs of students, INSE faculty, and the local community; (3) to encourage the integration of faculty scholarly activities into the classroom; and (4) to encourage innovation in the classroom in instructional methods, assignments, and testing approaches.

GENERAL EDUCATION AND B.S.I.S. REQUIREMENTS:

English Composition (6 hours): ENGL 1101-1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): ENGL 3603.

Mathematics (24 hours): MATH 1321(4), 2321(4), 2322 (4), 3391, 4240, 4635, and 4637.

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 4260, PHIL 3411, PHIL 3512, POLS 3402, UNIV 3581. **NOTE:** *Courses need to be selected that provide both breadth and depth and not be limited to a selection of unrelated introductory courses. In order to meet this requirement, the selection of these courses must be approved by the program director or the director's designee.*

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422. **NOTE:** *Students who completed one unit of American History in high school and who complete the B.S.I.S. degree requirements are exempt from this requirement.*

Social Science (6 hours): ECON 2110 and one of the following: ANTH 1100, 1200, CJUS 1100, 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, 2301, POLS 2501, PSYC 1101, 2201, SOCI 1111, 2100, SOCI 2101/CSED 2101, UNIV 2304.

Natural Science (16 hours): CHEM 1131/1121; PHYS 2510/2003, 2520/2004, and one of the following: BIOL 1151/1152, 1161/1162, 1751/1752, CHEM 1132/1122, or GEOL 1101.

Fitness and Wellness: (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

Collateral Courses: (24 hours): ELEC 2283; MECH 1307, 2332; CIVL 1101, 2131, 4111; PHIL 1611, and PHIL 3411 or 3511 or 3512.

The following courses and hours are included in the description of the major found below:

Computation Intensive [C]: (3 hours): At least one upper division course designated as computation intensive and approved by advisor. Prerequisite: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive [W]: (3 hours): At least one upper division course designated as writing intensive and approved by advisor. Prerequisite: Satisfactory completion of the General Education English composition requirement.

Integrative [I]: (3 hours): At least one upper division course designated as integrative and approved by advisor. Prerequisite: Satisfactory completion of the General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: MECH 1307 and INSE 3612.

The Major: See description below. (37-39)

TOTAL HOURS (132-140)

INDUSTRIAL AND SYSTEMS ENGINEERING

The Major: 37-39 hours including INSE 3601, 3610, 3612, 3640, 3644, 4608, 4690, 4691; plus 15 hours of industrial and systems engineering electives approved by an advisor. Twelve of the fifteen hours must be selected from the same areas (All the courses need not be from the same area):

a. Deterministic Methods: INSE 4610, 4612, 4614

b. Stochastic Methods: INSE 4642, 4644

c. Manufacturing Engineering: INSE 4670, 4672, 4674, 4676, 4678

TYPICAL SEQUENCE

FRESHMAN YEAR			
ENGL 1101	3	ENGL 1102	3
MATH 1321	4	MATH 2321	4
CHEM 1121	3	PHYS 2510	3
CHEM 1131	1	Natural Science	4
HMSE 1100	2	MECH 1307	4
CIVL 1101	3	PHYS 2003	1
	16		18

SOPHOMORE YEAR			
ENGL 2201/02	3	Gen Ed. (Fine Arts)	3
MATH 2322	4	MATH 3391	2
PHYS 2520	3	ELEC 2283	3
CIVL 2131	3	Physical Activity	2
ECON 2110	3	MECH 2332	3
PHYS 2004	1	Gen. Ed. (Hist/Phil)	3
	17		17

JUNIOR YEAR			
MATH 4240	3	ENGL 3603	3
CIVL 4111	3	PHIL 1611	3
INSE 3610	3	INSE 3601	3
Gen. Ed. (Social Science	3	INSE 3640	3
MATH 4637	3	INSE 3612	3
INSE 4690	1		
	16		15

SENIOR YEAR			
PHIL elec. [1]	3	Gen. Ed. (Hist/Phil)	3
MATH 4635	3	INSE 4691	3
INSE 4608	3	INSE[2]	3
INSE 4690	1	INSE[2]	3
INSE 3644	3	INSE[2]	3
INSE [2]	3	INSE[2]	3
	16		18

[1] Selected from PHIL 3411, 3511, or 3512.

[2] INSE denotes an elective INSE course. Students may take courses in one or more of the following specialty areas:

—deterministic methods

—stochastic methods

—manufacturing engineering

Bachelor of Science in Electrical Engineering

The educational objectives of the electrical engineering program are consistent with the mission of The University of Memphis. The program is designed to provide students satisfying, robust, and quality education in electrical engineering, leading to professional employment and/or graduate-level education. The program seeks to provide the mid-south region with the following: a pool of engineering employees; services in educational areas; engineering expertise for industries and governmental agencies. It also seeks to maintain credible research activities to support and enhance the department's educational programs.

In pursuit of these objectives, students enrolled in electrical engineering are offered a curriculum designed to provide a thorough background and understanding of the theoretical and physical principles of electric and magnetic phenomena. The intent of the program is to produce graduates who can apply concepts and techniques of mathematics and physics to a variety of analysis and design applications in electrical engineering. In addition graduates are prepared to communicate their ideas succinctly and clearly in both oral and written presentations.

Laboratory facilities are available for a wide variety of instructional and research activities. Significant laboratory activity is required in the curriculum.

Career opportunities include positions in development and design, research, sales, management, manufacturing, and construction. Some of the technical areas of opportunity are related to computer applications, communications systems, power generation and distribution systems, microwave and antenna systems, automatic control systems, and general instrumentation. An undergraduate student, with the approval of the department chairman, may select some electives that satisfy the course entrance requirements for medical school.

Honors Program: Students are eligible for the honors program in electrical engineering if they maintain a GPA of 3.25 with junior or senior standing or have received approval of the departmental honors committee. The honors program in electrical engineering requires 9 hours of honors courses in electrical engineering and must include ELEC 4999. Those students who complete the program and the regular B.S.E.E. requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Electrical Engineering." Moreover, the student's diploma and record at The University of Memphis will reflect this accomplishment. Details concerning this program and honors course

offerings are available in the Department of Electrical Engineering.

The Department of Electrical Engineering offers a Master of Science degree for electrical engineers who desire advanced study in electro-optical systems, automatic control systems, engineering computer systems, and communications and propagation systems. The department also offers a concentration in Electrical Engineering for students pursuing the interdepartmental Doctor of Philosophy degree.

Details about the program and the program objectives are available on the departmental home page of the world wide web (http://www.ee.memphis.edu/).

GRADUATION: The minimum requirements for the degree of Bachelor of Science in Electrical Engineering are given below. The student must satisfy general university and college requirements. The student must obtain a grade of C or better in ELEC 1202, 1207, 2201, 2222; MATH 1321, 2321, 2322, 3391; CIVL 2131; MECH 2322; CHEM 1121, 1131; PHYS 2003, 2004, 2510, 2520 or any equivalents to these courses used to satisfy degree requirements. In addition, an average grade of C must be maintained in all undergraduate electrical engineering course work. No transfer credit with a grade less than C may be used to satisfy a requirement for the Bachelor of Science in Electrical Engineering.

MINORS: Students satisfying the requirements for the Bachelor of Science in Electrical Engineering may also satisfy requirements for a minor offered by a department in one of the other colleges. Requirements for minors are specified by the appropriate college and department. Students should submit application for the minor to the appropriate department chair. Candidates for graduation who satisfy requirements for a minor should file the approved application with the intent-to-graduate cards.

GENERAL EDUCATION AND B.S.E.E. REQUIREMENTS: (65-75 hours)

English Composition (6 hours): ENGL 1101-1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): ENGL 3603.

Mathematics (18-22 hours) including 18 hours in the following courses: MATH 1321, 2321, 2322, 3391, and one upper division MATH course selected with advisor's approval. **NOTE:** *Students who have not had MATH 1211 or 1213 or its equivalent must take it before enrolling in MATH 1321.*

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 4260, PHIL 3411, PHIL 3512, POLS 3402, UNIV 2860, 3581. **NOTE:** *Courses need to be selected that provide both breadth and depth and not be limited to a selection of unrelated introductory courses. In order to meet this requirement, the selection of these courses must be approved by the department chair or the chair's designee.*

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282 GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422. **NOTE:** *Students who completed one unit of American History in high school and who complete the B.S.E.E. degree requirements are exempt from this requirement.*

Social Science (6 hours): ECON 2110 and one of the following: ANTH 1100, ANTH 1200, CJUS 1100, CJUS 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 2301, POLS 2501, PSYC 1101, PSYC 2201, SOCI 1111, SOCI 2100, SOCI 2101/CSED 2101, UNIV 2304.

Natural Science (16 hours): CHEM 1121, CHEM 1131; PHYS 2003/2510 and PHYS 2004/2520, and one of the following: BIOL 1151/1152, 1161/1162, 1751/1752, CHEM 1122/1132, or GEOL 1101.

Fitness and Wellness: (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

Collateral Courses: CIVL 2131; MECH 2332, 3310. (9)

The following courses and hours are included in the description of the major found below:

Computation Intensive [C]: ELEC 3240 or 4201.

Writing Intensive [W]: ELEC 4280 or 4993.

Integrative [I]: ELEC 4280 or 4993.

Computer Literacy: ELEC 1202 and 1207.

The Major: See description below. (63)

TOTAL HOURS (137-147)

ELECTRICAL ENGINEERING

The Major: 63 hours including ELEC 1202, 1207, 2201 (4), 2222 (4), 3201 (4), 3202, 3211, 3212 (4), 3213 (1), 3221, 3240 **[C]**, 4201 **[C]**, 4203 (1), 4231, 4280 **[I, W]**; 12 hours of ELEC electives approved by advisor; 6 hours of technical electives approved by advisor. Students may use elective hours to broaden their base of knowledge or for one of the concentrations below. A minimum of 9 semester hours is required for a concentration. The concentrations are the following:

a. **Computer Engineering:** ELEC 3220, 4222, 4230, 4270 (4), 4271, 4272, 4274, 4720, and 4730.

b. **Electrophysics:** ELEC 4212 (4), 4240, 4241, 4242, and 4243.

c. **Systems and Signals:** ELEC 4202, 4204, 4221 (4), 4223, 4232, 4236, 4251, 4252, 4253 (1), and 4261.

NOTE: Projects I or II, ELEC 4991 or 4992 can be taken for up to 6 semester hours credit in any of the areas of concentration.

TYPICAL SEQUENCE

FRESHMAN YEAR

ENGL 1101	3	ENGL 1102	3
MATH 1321	4	MATH 2321	4
ELEC 1202	3	ELEC 1207	3
CHEM 1121, 1131	4	PHYS 2003/2510	4
HPER 1100	2	Gen. Ed. (Natural Science)	4
	16		18

SOPHOMORE YEAR

ENGL 2201 or 2202	3	Gen. Ed. (Fine Arts)	3
MATH 2322	4	MATH 3391	3
PHYS 2004/2520	4	ELEC 2201, 2203	4
CIVL 2131	3	MECH 2332	3
ELEC 2222	4	ECON 2110	3
		Physical Activity	2
	18		18

JUNIOR YEAR

ELEC 3201	4	ELEC 3202	3
ELEC 3211, 3213	4	ELEC 3212	4
ELEC 3221	3	MECH 3310	3
[5]Math Elective	3	ELEC 3240 **[C]**	3
[1]Gen. Ed. (Hist/Phil: pre-1500)	3	[1]Gen. Ed. (Hist/Phil: post-1500)	3
	17		16

SENIOR YEAR

[4]ELEC 4231	3	ELEC 4280 **[W,I]**	3
ELEC 4201 **[C]**, 4203	4	[3]ELEC Electives	8
[3]ELEC Elective	4	[2]Technical Elective	6
ENGL 3603	3		
[1]Gen. Ed. (Social Sci.)	3		
	17		17

[1] In addition to meeting the university General Education requirements, this course must be used to fulfill part of the engineering humanities and social sciences requirement. The combination must include a sequence of courses that reflects both breadth and depth in a particular area. Chair's or designee's approval required.

[2] Upper division courses in engineering, mathematics, physics. Approval of chair required.

[3] Upper division courses in electrical engineering. Courses selected must include sufficient design content. Advisor's approval required.

[4] Substitution of ELEC 4232 or 4235 may be made with advisor's approval.

[5] Upper division courses in mathematics. Approval of chair required.

Bachelor of Science in Mechanical Engineering

Mechanical Engineering is a broad field that contains many areas. Students are offered a wide variety of topics that touch on as many of these areas as possible in a balanced four year program. The curriculum is designed to prepare graduates for professional practice, and to provide a foundation for lifelong learning as well as professional growth. The course of study begins with a strong foundation in mathematics, physical sciences, and engineering sciences, and culminates in a series of synthesis and design courses. These require the student to apply material learned in foundation courses to practical design problems in various areas. Traditional classroom instruction is supplemented with laboratory experiences in four areas. The laboratory courses are designed to develop the student's knowledge base with a hands-on learning experience.

The diversity encountered in the profession requires the successful Mechanical Engineer to have technical and non-technical skills. Courses in the humanities and social sciences enhance non-technical skills, and explore the engineer's relationship with, and responsibility to, society. Students learn that as professionals, they identify with other engineers, and that the welfare of the public is of prime concern. These non-technical courses allow the student to interact and communicate effectively with a wide variety of individuals. One important supplement to this study is a series of lectures on engineering ethics and professionalism.

This well-rounded curriculum equips typical Mechanical Engineering graduates of the University of Memphis with the skills and perspectives required for success in a variety of professional roles. These include ability to conduct project design work, to manage projects, to interface successfully with the public, to continue their education, to conduct themselves with a professional demeanor, with

propriety, and with a comportment that will make them an asset of the profession.

GRADUATION: To qualify for the degree of Bachelor of Science in Mechanical Engineering, the student must satisfy the following general university and college requirements, and obtain a C or better in all engineering, mathematics, physics, and chemistry courses used toward graduation.

GENERAL EDUCATION AND B.S.M.E. REQUIREMENTS: (62-72 hours)

English Composition (6 hours): ENGL 1101-1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): ENGL 3603.

Mathematics (15-19 hours) including 15 hours in the following courses: MATH 1321, 2321, 2322, and 3391. **NOTE:** *Students who have not had MATH 1213 or its equivalent must take it before enrolling in MATH 1321.*

Literary Heritage (3 hours): ENGL 2201 *or* 2202.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, *or* THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 4260, PHIL 3411, PHIL 3512, POLS 3402, UNIV 2860, 3581. **NOTE:** *Courses need to be selected that provide both breadth and depth and not be limited to a selection of unrelated introductory courses. To meet this requirement, the selection of these courses must be approved by the department chair or the chair's designee.*

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422. **NOTE:** *Students who completed one unit of American History in high school and who complete the B.S.M.E. degree requirements are exempt from this requirement.*

Social Science (6 hours): ECON 2110 and one of the following: ANTH 1100, ANTH 1200, CJUS 1100, CJUS 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 2301, POLS 2501, PSYC 1101, PSYC 2201, SOCI 1111, SOCI 2100, SOCI 2101/ CSED 2101, UNIV 2304.

Natural Science (16 hours): CHEM 1121, 1131, 1122, 1132, and PHYS 2003, 2510, 2004, 2520.

Fitness and Wellness: (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

Collateral Courses: CIVL 2131; ELEC 2281 (1), 2283. (7)

The following courses and hours are included in the description of the major found below:

Computation Intensive [C]: MECH 3341.

Writing Intensive [W]: MECH 4312.

Integrative [I]: MECH 4314 (4).

Computer Literacy: MECH 1307 and 3341.

The Major: See description below. (63-64)

TOTAL HOURS (132-143)

MECHANICAL ENGINEERING

The Major: 63-64 hours including MECH 1307, 3312, 3320, 3321, 3322, 3323, 3325 (1), 3331, 3335 (1), 3341 **[C]**, 4300 (1), 4311, 4312 **[W]**, 4314 **[I]** (4), 4322, 4323 (4), 4335, (1); 9-10 hours of electives approved by the advisor. If the student declares a concentration, a minimum of ten semester hours is required in the designated concentration (including the relevant four-hour design course).

a. **Mechanical Systems:** MECH 4323 (4) and at least two courses approved by an advisor from the following: MECH 4320, 4324, 4325, 4330, 4340, 4344, 4345, 4346, 4360, 4371, 4391.

b. **Energy Systems:** MECH 4314 (4) and at least two courses approved by an advisor from the following: MECH 4305, 4309, 4313, 4315, 4331, 4333, 4337, 4369, 4391.

c. **Biomedical Systems:** MECH 4350 (4), 4326 and 4365.

TYPICAL SEQUENCE

FRESHMAN YEAR			
ENGL 1101	3	ENGL 1102	3
MATH 1321	4	MATH 2321	4
MECH 1307	3	PHYS 2003/2510	4
CHEM 1121, 1131	4	CHEM 1122,1132	4
HMSE 1100	2	Gen. Ed. (Social Science)	3
	16		18

SOPHOMORE YEAR			
ENGL 2201 *or* 2202	3	MATH 3391	3
MATH 2322	4	MECH 2308	3
PHYS 2004/2520	4	MECH 2332	3
CIVL 2131	3	MECH 3341 **[C]**	3
MECH 3320	3	MECH 3311	3
	17		15

JUNIOR YEAR			
MECH 3312	3	MECH 3323	3
MECH 3321	3	MECH 4311	3
MECH 3322	3	MECH 4335	1
MECH 3325	1	ELEC 2283	3
MECH 3331	3	ELEC 2281	1
MECH 3335	1	ECON 2110	3
ENGL 3603	3	[1]Gen. Ed. (Hist/Phil: **pre-1500**)	3
	17		17

SENIOR YEAR			
MECH 4314 **[I]**	4	MECH 4323	4
MECH 4322	3	MECH 4312 **[W]**	3
MECH Elective	3	[3]Technical Elective	3
Physical Activity	2	[2]MECH Elective	3
Gen. Ed. (Fine Arts)	3	[1]Gen. Ed. (Hist/Phil:	
MECH 4300	1	**post-1500**)	3
	16		16

[1] In addition to meeting the university General Education requirements, this course must be used to fulfill part of the engineering humanities and social sciences requirement. The combination must include a sequence of courses that reflects both breadth and depth in a particular area. Approval of department chair or designee is required.

[2] An upper division course in Mechanical Engineering. Advisor's approval required.

[3] An upper division course in engineering, mathematics, physics, or chemistry. Advisor's approval required.

HONORS PROGRAM: The Honors in Mechanical Engineering Program provides an exceptional educational opportunity for highly motivated students to develop their talents, interests, and abilities within a curriculum designed to encourage independence and creativity.

ADMISSION: Incoming freshmen who score at least 26 on the ACT or its equivalent are invited to participate. Transfer students or students previously enrolled at The University of Memphis are eligible for the program if they have an overall grade point average of 3.00 and a grade point average of 3.25 for coursework within the Herff College of Engineering. Eligible students are admitted to the program upon approval of an Intent to Pursue Honors application by the departmental honors committee. Students with academic records that fall short of these requirements may apply for provisional acceptance.

RETENTION: Participants must maintain an overall grade point average of 3.00 and a grade point average of 3.25 for coursework within the college to continue in the program. Participants failing to meet this requirement may be granted a one semester probationary period by the departmental honors committee before they are dismissed from the program.

REQUIREMENTS: To qualify for Honors in Mechanical Engineering a student must successfully complete a minimum of 18 semester hours from the following: 1) MECH 4395 and MECH 4396, 2) 9 credits of upper division mechanical engineering honors courses, and 3) 3 credits of MECH 1395, MECH 2395, or MECH 3395. A minimum grade of B is required in each honors course for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a B.

THESIS: A participant must select a major advisor during the first semester senior year and enroll in MECH 4395. Successful completion of this course requires acceptance of a thesis proposal by the departmental honors committee. During the second semester of the senior year a participant must enroll in MECH 4396. Successful completion of this course requires acceptance of a thesis by the departmental honors committee.

DESIGNATION OF "WITH HONORS IN MECHANICAL ENGINEERING": Students successfully completing the prescribed coursework will have earned the designation of "With Honors in Mechanical Engineering." This designation will be recognized at the commencement ceremony and it will appear on the transcript and diploma.

Bachelor of Science in Engineering Technology

Engineering Technology is that part of the technological field requiring the application of scientific and engineering knowledge and methods combined with technical skills in support of engineering activities. The Department of Engineering Technology offers four majors leading to the degree Bachelor of Science in Engineering Technology. These majors are Architectural Technology, Computer Engineering Technology, Electronics Engineering Technology, and Manufacturing Engineering Technology.

In addition to meeting general university requirements, students must attain a grade of C or better in designated engineering technology courses within each major.

GENERAL EDUCATION AND B.S.E.T. REQUIREMENTS: (60 hours)

English Composition (9 hours): ENGL 1101-1102, with a minimum grade of C, and ENGL 3601.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (8 hours): MATH 1213 and 1321.

Literary Heritage (3 hours): ENGL 2201 *or* 2202.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551. **NOTE:** *Architectural Technology majors must take ART 1101.*

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581. **NOTE:** *Architectural Technology majors must take HIST 1301, PHIL 1102.*

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422. **NOTE:** *Architectural, Computer Engineering, and Manufacturing Engineering Technology majors must take HIST 2601, 2602.*

Social Science (6 hours): One course from list A and one from A or B: **NOTE:** *Architectural Technology majors must take ANTH 1200, SOCI 1111.*

A. (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/ CSED 2101, UNIV 2304.

B. ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (12 hours—Sequence required): PHYS 2001, 2110, 2002, 2120, and CHEM 1101.

Fitness and Wellness (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

Engineering Technology Core: TECH 1010, 1411 (1), 1521, 3044 (4), 4944. (14)

The following courses and hours are included in the description of the major found below:

Computation Intensive [C]: TECH 3044 (4), 3471 or 4462.

Writing Intensive [W]: TECH 4944.

Integrative [I]: TECH 4235 (4) or 4944.

Computer Literacy: TECH 1010 or 1210; and TECH 2561 or 3233 (4) or 3281 (4) or 3562 or 4472.

The Major: Select one of the following majors: Architectural Technology (60), Computer Engineering Technology (64), Electronics Engineering Technology (65-67), Manufacturing Engineering Technology (61). See descriptions below. (60-67)

TOTAL HOURS (134-141)

ARCHITECTURAL TECHNOLOGY

Architectural technology is concerned with the various aspects of architecture and design as related to buildings and building systems. The Architectural Technology Program at The University of Memphis provides a broad range of educational experiences based in design and technology to aid students in developing the skills and knowledge necessary to design buildings, manage projects, and plan building sites and their surroundings. Design and technology are synthesized in the design studio, in which students develop solutions to a variety of problems, many of which utilize the Memphis metropolitan area as an urban laboratory. Courses emphasize the development of skills essential in the practice of architecture and include the investigation of the physical, social, political, and aesthetic issues that affect the built environment. The B.S.E.T. degree with a major in Architectural Technology satisfies one of the requirement for registration as an architect in Tennessee.

The Major: 60 hours including TECH 1555, 1561, 2451, 2555 (4), 2556, 2561, 3401, 3408(4), 3471, 3472, 3520 (4), 3531, 3562, 3691, 4515 (4), 4535, 4600 (4), 4615 (4).

NOTE: Substitutions must be approved by the program coordinator.

TYPICAL SEQUENCE

FRESHMAN YEAR			
ENGL 1101	3	ENGL 1102	3
TECH 1010	3	ART 1101	3
MATH 1213	4	MATH 1321	4
TECH 1411	1	TECH 1561	3
TECH 1521	3	TECH 2451	3
TECH 1555	3	HMSE 1100	2
Physical Activity	2		
	19		18

SOPHOMORE YEAR			
ENGL 2201 or 2202	3	COMM 2381	3
PHYS 2001/2110	4	PHYS 2002/2120	4
TECH 2555	4	TECH 2561	3
TECH 3044 **[C]**	4	TECH 2556	3
TECH 3401	3	TECH 3408	4
	18		17

JUNIOR YEAR			
HIST 2601	3	HIST 2602	3
TECH 3471 **[C]**	3	ENGL 3601	3
TECH 3520	4	TECH 3472	3
TECH 3531	3	TECH 3691	3
TECH 3562	3	TECH 4515	4
	16		16

SENIOR YEAR			
SOCI 1111	3	PHIL 1102	3
CHEM 1101	4	HIST 1301	3
TECH 4535	3	ANTH 1200	3
TECH 4600	4	TECH 4944 **[W, I]**	3
TECH 4615	4	TECH ELEC	3
	18		15

COMPUTER ENGINEERING TECHNOLOGY

This area of study is designed to prepare for positions that require a knowledge of computer architecture and programming and the application of computers in various industries.

The Major: 64 hours including TECH 1210, 1811, 2230 (4), 2251 (4), 2261 (4), 2821, 2831, 3232, 3233 (4), 3251 (4), 3281 (4), 4234 (4), 4235 (4), 4261 (4), 4272 (4), 4381, 4462 **[C]**, 4474.

NOTE: Substitutions must be approved by the program coordinator.

TYPICAL SEQUENCE

FRESHMAN YEAR			
ENGL 1101	3	ENGL 1102	3
TECH 1010	3	CHEM 1101	4
HMSE 1100	2	MATH 1321	4
MATH 1213	4	*Physical Activity	2
TECH 1411	1	TECH 1210	3
TECH 1521	3	TECH 1811	3
	16		19

SOPHOMORE YEAR			
ENGL 2201 or 2202	3	PHYS 2002/2120	4
PHYS 2001/2110	4	COMM 2381	3
TECH 2251	4	TECH 2230	4
TECH 2821	3	TECH 2261	4
TECH 3044 **[C]**	4	TECH 2831	3
	18		18

JUNIOR YEAR			
ENGL 3601	3	*General Education	3
*General Education	3	*General Education	3
*General Education	3	HIST 2602	3
HIST 2601	3	TECH 3233	4
TECH 3232	3	TECH 3281	4
	15		17

SENIOR YEAR			
TECH 3251	4	*General Education	3
TECH 4234	4	TECH 4235 **[I]**	4
TECH 4261	4	TECH 4272	4
TECH 4381	3	TECH 4462 **[C]**	3
TECH 4474	3	TECH 4944 **[I, W]**	3
	18		17

*Must satisfy General Education degree requirements.

ELECTRONICS ENGINEERING TECHNOLOGY

This area of study is designed for students interested in the application of electronics theory and techniques to the fields of communications, industrial electronics, and computer electronics. Requirements for this major are as follows:

The Major: 65-67 hours including TECH 1711, 1811, 2230 (4), 2821, 2831, 3232, 3233 (4), 3440, 3811, 3812, 3821, 3822 (4), 3841, 4234 (4), 4381, 4821 (4), 4823, 4841, and two technical electives (6-8 hours) approved by an advisor.

NOTE: Substitutions must be approved by the program coordinator.

TYPICAL SEQUENCE

FRESHMAN YEAR			
*General Education	3	CHEM 1101	4
ENGL 1101	3	ENGL 1102	3
MATH 1213	4	MATH 1321	4
TECH 1010	3	TECH 1411	1
TECH 1521	3	TECH 1711	3
HMSE 1100	2	TECH 1811	3
		*Physical Activity	2
	18		20

SOPHOMORE YEAR			
*General Education	3	COMM 2381	3
ENGL 2201 or 2202	3	PHYS 2002/2120	4
PHYS 2001/2110	4	*General Education	3
TECH 2821	3	TECH 2230	4
TECH 3044 **[C]**	4	TECH 2831	3
	17		17

JUNIOR YEAR			
*General Education	3	Technical Elective	3-4
*General Education	3	TECH 3233	4
TECH 3232	3	TECH 3812	3
TECH 3811	3	TECH 3822	4
TECH 3821	3	TECH 3841	3
ENGL 3601	3		
	18		17-18

SENIOR YEAR			
*General Education	3	*General Education	3
TECH 4234	4	TECH 3440	3
TECH 4381	3	TECH 4821	4
TECH 4823	3	TECH 4841	3
Technical Elective	3-4	TECH 4944 [W,I]	3
	16-17		16

*Must satisfy General Education degree requirements.

MANUFACTURING ENGINEERING TECHNOLOGY

This program is designed for those individuals interested in careers in the manufacturing or service industries. Students will study a combination of technological and mechanical concepts coupled with quantitative management techniques that will enable them to design, control, and manage both traditional and automated industrial systems that utilize complex machinery and production systems.

Graduates of this program are employed in the areas of quality assurance, supervision, plant management, manufacturing engineering technology, materials handling, industrial safety, systems planning, process planning, computer integrated manufacturing, technical sales, customer service, and warehouse management.

The Major: 61 hours including TECH 1711, 1811, 2812, 2813, 3386, 3401, 3408 (4), 3421, 3440, 3462, 3573, 4381, 4460, 4462 **[C]**, 4464, 4466, 4472, 4474, 4476, 4571.

TYPICAL SEQUENCE

FRESHMAN YEAR			
*General Education	3	*General Education	3
ENGL 1101	3	ENGL 1102	3
MATH 1213	4	HMSE 1100	2
TECH 1411	1	MATH 1321	4
TECH 1521	3	TECH 1010	3
TECH 1711	3	TECH 1811	3
	17		18

SOPHOMORE YEAR			
ENGL 2201 or 2202	3	*General Education	3
CHEM 1101	4	Physical Activity	2
PHYS 2001/2110	4	COMM 2381	3
TECH 2812	3	PHYS 2002/2120	4
HIST 2601	3	TECH 2813	3
		HIST 2602	3
	17		18

JUNIOR YEAR			
ENGL 3601	3	TECH 3386	3
TECH 3044 [C]	4	TECH 3408	4
TECH 3401	3	TECH 3440	4
TECH 3421	3	TECH 3573	3
TECH 3462	3	*General Education	3
	16		17

SENIOR YEAR			
*General Education	3	TECH 4462 [C]	3
TECH 4381	3	TECH 4466	3
TECH 4460	3	TECH 4476	3
TECH 4464	3	TECH 4571	3
TECH 4472	3	TECH 4944 [W, I]	3
TECH 4474	3	Technical Elective	3
	18		18

*Must satisfy General Education degree requirements.

THE MINORS

In the minors listed below, some prerequisites may not be listed. Check course listings and observe all prerequisites before enrolling in the courses required for the minor.

ARCHITECTURAL TECHNOLOGY:

TECH 1555, 1561, 2555, 3520, 4535, 4600.

COMPUTER ENGINEERING TECHNOLOGY:

TECH 1210, 1811, 2261 (4), 2821, 3232, 3233, 3251, 4261 (4).

ELECTRONICS ENGINEERING TECHNOLOGY:

TECH 1811, 2821, 2831, 3811, 3821, 3841.

MANUFACTURING ENGINEERING TECHNOLOGY:

TECH 1521, 1711, 3421, and observe prerequisites when enrolling for 9 additional hours from TECH 4460, 4462, 4464, 4466, 4472, 4474, 4476, 4571, 4950, 4991.

SURVEYING:

TECH 1521, 2451, 3451; GEOG 4510, 4511; PHYS 1001/1010, 1002, 1020.

TECHNOLOGY:

TECH 1411, 1521, 1711, and 15 additional semester hours in technology courses, 9 semester hours of that must be from the upper division in one of the specific technology areas.

Engineering Course Descriptions

ENGINEERING

PROFESSOR
RICHARD C. WARDER, JR., *Dean*
Room 201A, Engineering Building

ENGINEERING (ENGR)

4001. Engineering Work Experience. (3). Off-campus work experience working on selected projects in coordination with chair or chair's designee in student's major department under direction of practicing engineer. Oral and written presentations may be required. *May be repeated as many times as student chooses.* PREREQUISITE: chair's and CO-OP director's approvals.

NOTE: *Students participating in ENGR 4001 are considered to be full-time students for enrollment certification purposes.*

BIOMEDICAL ENGINEERING

VINCENT TURITTO, Sc.D., *Chair*
Room 330, Engineering Technology
http://mecca.mecca.org/BME/bme-home.html

BIOMEDICAL ENGINEERING (BIOM)

The Department of Biomedical Engineering at The University of Memphis and the School of Biomedical Engineering at The University of Tennessee, Memphis participate in the Joint Program in Biomedical Engineering. The Joint Program offers graduate degrees leading to a Master of Science and a Doctor of Philosophy in Biomedical Engineering.

4702. The Tools of Biomedical Engineering Research. (3). Lectures and laboratory work covering basic biochemical abd biophysical measurement techniques used by biomedical engineers. Topics include light spectroscopy, gel exclusion and affinity chromatography, electrophoresis, and immunoblotting, and radioisotopic methods. PREREQUISITE: Permission of instructor.

4900-19-6900-19. Special Topics In Biomedical Engineering. (1-3). Topics are varied and announced in the *Schedule of Classes.*

CIVIL ENGINEERING

PROFESSOR
MARTIN E. LIPINSKI, P.E., *Chair*
Room 104A, Engineering Building
http://www.ce.memphis.edu/

CIVIL ENGINEERING (CIVL)

1101. Civil Engineering Measurements. (3). (2111). Theory of measurements, linear measurements, angles, topographic surveys, and mapping with applications in Civil Engineering; emphasis on individual and group problem solving, techniques of data collection and analysis, and project documentation. *Two lecture, three laboratory hours per week.*

1112. Civil Engineering Analysis. (3). (2112). Microcomputer applications for data analysis, presentation, documentation; emphasis on algorithm design and logic; fundamental numerical analysis; elementary programming. *Two lecture, three laboratory hours per week.* PREREQUISITE: CIVL 1101. PREREQUISITE or COREQUISITE: MATH 1321.

2107. Civil Engineering Computation. (3). (1107). Logical analysis of problems. Development and implementation of computer programs in support of civil engineering analysis and design. *Two lecture, three laboratory hours per week.* PREREQUISITE: CIVL 1112; PREREQUISITE or COREQUISITE: MATH 2321.

2131. Statics. (3). Analysis of two and three dimensional force systems; centroids and moments of inertia; friction. *Three lecture hours per week.* PREREQUISITES: MATH 2321, PHYS 2510, 2003.

3101. Computer Methods In Civil Engineering. (3). Civil engineering applications of fundamental methods of numerical analysis; advanced programming techniques. *Three lecture hours per week.* PREREQUISITE: CIVL 2107. PREREQUISITE or COREQUISITE: MATH 3391.

3113. Stochastic Systems Engineering. (3). (4113). Development and use of probabilistic techniques in civil engineering. Emphasis on applications. Topics include simulation, decision making under uncertainty, and queueing problems. *Three lecture hours per week.* PREREQUISITE: MATH 2322.

3121. Structural Analysis I. (3). Analysis of statically determinate structures; reactions, shear, and moment; truss analysis; deflections; influence lines and moving loads. *Three lecture hours per week.* PREREQUISITE: CIVL 2107, 2131. **[C]**. PREREQUISITE or COREQUISITE: CIVL 3322.

3131. Design of Steel Structures. (3). Current design concepts for structural steel members and their connections. *Three lecture hours per week.* PREREQUISITES: CIVL 3121, 3322.

3137. Civil Engineering Materials. (2). (3135). Properties of aggregates, mix design and use of Portland cement concrete, masonry products and construction, use of wood and timber products in construction, bituminous materials and mixtures and other engineering materials. *One lecture, three laboratory hours per week.* PREREQUISITES: CIVL 3322, 3325.

3140. Environmental Systems Engineering. (3). Fundamentals of environmental engineering systems with emphasis on the integration of the concepts of chemistry, hydraulics, economics, English, and social sciences as they can be applied to benefit mankind. *Two lecture, three laboratory hours per week.* PREREQUISITE: CIVL 3180.

3161. Transportation Systems Engineering. (3). (4161). Development and function of transportation systems; operational control and characteristics; system coordination, traffic flow and patterns. *Three lecture hours per week.* PREREQUISITES: CIVL 2107, MECH 2332, MATH 2322.

3180. Civil Engineering Hydraulics. (3). Basic principles of incompressible fluid mechanics with emphasis on hydrostatics, conservation of energy and momentum with application on engineering analysis of pipe networks, pumps, and open channel systems. *Three lecture hours per week.* PREREQUISITE: CIVL 2107; MECH 2332.

3181. Hydrology and Hydraulics. (3). (4148). Quantification of precipitation and runoff, reservoir and channel routing, groundwater, and design of drainage systems and open channels. *Three lecture hours per week.* PREREQUISITE: CIVL 3180.

3182. Hydrology and Hydraulics Laboratory. (1). Principles of fluid mechanics, open channel hydraulics, and collection of hydrologic data; fluid instrumentation, measurement techniques, data collection methods, and organization of written reports of experimental investigations. *Two laboratory hours per week.* PREREQUISITE: CIVL 3180.

3322. Mechanics of Materials. (3). (Same as MECH 3322). Analysis of components subjected to tension, compression, bending moment, torque; combined loading; Mohr's stress circle; deflection of beams; simple treatment of column buckling. *Three lecture hours per week.* PREREQUISITE: CIVL 2131.

3325. Mechanics of Materials Laboratory. (1). Materials testing and evaluation. *Three laboratory hours per week.* COREQUISITE or PREREQUISITE: CIVL 3322.

4111. Engineering Economics. (3). (3141). Application of economics and decision theory to engineering alternatives in planning, developing, constructing, and managing engineering projects. *Three lecture hours per week.*

4112-6112. Deterministic Systems Engineering. (3). Employment of optimization techniques to well-defined civil engineering problems. Emphasis on development and applications of mathematical models. Topics include transportation and resource allocation problems. *Three lecture hours per week.* PREREQUISITE: CIVL 3101.

4122. Structural Analysis II. (3). (3122). Analytical and numerical solutions for statically indeterminate structures. *Three lecture hours per week.* PREREQUISITES: CIVL 3121, 3322.

4131-6131. Intermediate Steel Design. (3). Design of plate girders and composite beams; moment connections; current code provisions. *Three lecture hours per week.* PREREQUISITES: CIVL 3131.

4135. Reinforced Concrete Design. (3). Strength analysis and design of reinforced concrete members; floor systems; current code provisions. *Three lecture hours per week.* PREREQUISITES: CIVL 3121, 3322.

4136-6136. Intermediate Reinforced Concrete Design. (3). Design of two-way slab systems; column design including length effects; current code provisions. *Three lecture hours per week.* PREREQUISITES: CIVL 4122, 4135.

4140-6140. Environmental Engineering Design. (3). Detailed design of one component of an environmental engineering system with appropriate consideration of the interactions with the other components. Design standards, procedures, and legal constraints will be emphasized. *Three lecture hours per week.* PREREQUISITE: CIVL 3140.

4143-6143. Physical/Chemical Treatment Systems. (3). Basic physical chemical treatment concepts for water and wastewater with laboratory demonstration of laboratory studies. *Two lecture, three laboratory hours per week.* PREREQUISITE: CIVL 3140.

4144-6144. Biological Wastewater Treatment Systems. (3). Basic biological treatment concepts for wastewater with laboratory demonstration of unit operations as well as derivation of design data through laboratory studies. *Two lecture/three laboratory hours per week.* PREREQUISITE: CIVL 3140.

4151. Soil Mechanics. (3). Properties of soil and rock, including identification and classification, hydraulic properties, consolidation characteristics, and stress deformation-strength relationships. *Two lecture, three laboratory hours per week.* PREREQUISITE: CIVL 2107, 3322.

4152. Applied Soil Mechanics. (3). Subsurface exploration, foundation types, foundation construction, selection of foundation type and basis of design, earth retaining structures, and slope stability. *Three lecture hours per week.* PREREQUISITE: CIVL 4151.

4162-6162. Traffic Engineering. (3). Traits and behavior patterns of road users and their vehicles. Includes traffic signs and signals, pavement markings, hazard delineation, capacity, accidents and parking analysis. PREREQUISITE: CIVL 3161.

4163-6163. Airport Planning and Design. (3). Aeronautical demand and air traffic control; airport and runway configuration; capacity and delay analysis, geometric design of runways and taxiways; airport access and parking; ground movements and baggage movements. *Three lecture hours per week.* PREREQUISITE: CIVL 3161.

4164-6164. Route Location and Design. (3). Elements of route location and design; emphasis on horizontal and vertical alignment, curvature, gradient and sight distance. *Two lecture, three laboratory hours per week.* PREREQUISITES: CIVL 1101, 3161.

4171. Construction Engineering I. (3). Construction process and project management system; planning, cost estimating, bidding and scheduling construction projects; use of optimization techniques to control schedules and costs; computer applications. *Three lecture hours per week.* PREREQUISITE or COREQUISITE: CIVL 4111.

4172. Construction Engineering II. (3). Application of construction engineering and management methods to estimate, bid, plan, and manage actual engineering construction project in safe, efficient manner. *Three lecture hours per week.* PREREQUISITE: CIVL 4171.

4173. Engineering Law. (3). Sources of law; forms of engineering organizations such as corporations, partnerships, and agencies; principles of contract law; application of construction law to the owner-engineer-contractor relationship, bidding, contracting, construction process, risk, disputes, and dispute resolution. *Three lecture hours per week.*

4180-6180. Advanced Hydrology and Hydraulics. (3). Current methods and techniques used in hydrologic and hydraulic analysis for the design of water resources projects; watershed hydrology, groundwater hydrology, flood frequency analysis, flood plain management, hydraulic structures, hydraulic machinery, and project feasibility. *Three lecture hours per week.* PREREQUISITE: CIVL 3181.

4190-6190. Water Resources Planning and Design. (3). Application of engineering principles to planning and design of multipurpose water resources projects, various physical components and appurtenances of water resources projects and economic, financial, and social feasibility of various purposes. *Three lecture hours per week.* PREREQUISITES: CIVL 3181, 4111 or consent of instructor.

4191. Civil Engineering Projects. (1-3). Independent investigation of a Civil Engineering problem in consultation with instructor. *May be taken for a maximum of three hours credit toward graduation.* PREREQUISITE: consent of instructor.

4193. Senior Seminar. (1). Reports and discussion on engineering history, current developments, ethics, professionalism, registration, engineering organizations, publications, and activities. *One lecture hour per week.* PREREQUISITE: Senior standing in civil engineering. (S/U)

4199. Civil Engineering Design. (3). Design of a civil engineering system. Establishment of design objectives and criteria; synthesis and computer assisted analysis of alternatives; selection of optimum system design; preparation of detailed system descriptions including design sketches and engineering drawings and reports. *Must be taken in student's final semester. Two lecture, two laboratory hours per week.* PREREQUISITE: ENGL 3603. **[W, I]**.

4900-10. Special Topics in Civil Engineering. (1-3). Topics are varied and announced in the *Schedule of Classes.*

INDUSTRIAL AND SYSTEMS ENGINEERING (INSE)

3601. Engineering Design and Analysis. (3). Review of probability theory, random variables, mathematical expectations; introduction to sampling distributions, estimation theory, hypothesis testing, and regression; applications oriented towards engineering. **(Sp)**. COREQUISITE: MATH 4637.

3610. Operations Research I. (3). Introduction to essential optimization tools: linear programming, goal programming, network analysis, dynamic programming, integer programming, nonlinear programming; presentation of case studies. **(F)**. **[C]**.

3612. Engineering Applications in Linear Optimization. (3). Review of linear algebra fundamentals; emphasis on modeling and formulation of LP's; development and use of simplex method, revised simplex method; development of linear models for problems in a range of engineering disciplines; motivation and use of duality, and sensitivity analysis. **(Sp)**. PREREQUISITES: MATH 4240, INSE 3610.

3640. Operations Research II. (3). Review of probability; introduction to renewal processes, Markov Chains, and queueing; emphasis on applications. **(Sp)**. PREREQUISITE: MATH 4637.

3644. Simulation. (3). Introduction to discrete and continuous event simulation; code development and verification; data collection and analysis emphasized; model validation, and performance enhancement techniques discussed. **(F)**. PREREQUISITES: INSE 3601, 3640.

4608. Modeling. (3). Issues in problem formulation and modeling philosophy; case studies and formulation; emphasis on the process, rather than the product; topics include deterministic and stochastic models; data structures. **(F)**. PREREQUISITES: INSE 3601, 3610, 3640.

4610. Integer Programming. (3). Optimization and heuristic techniques; branch-and-bound, cutting plane are emphasized; case studies; brief introduction to complexity theory. **(Sp)**. PREREQUISITES: INSE 3610, 3612.

4612. Network Models. (3). Path and tree problems introduced; focus on network flow problems, with discussions and case studies; scheduling problems will be addressed. **(F)**. PREREQUISITES: INSE 3610, 3612.

4614. Dynamic Programming. (3). Both deterministic and stochastic models discussed; emphasis on formulation of models, with applications in equipment replacement, resource allocation, scheduling, and search. **(F)**. PREREQUISITES: INSE 3610, 3612.

4642. Forecasting. (3). Development of trend analysis; ARMA/ARIMA Models and Box-Jenkins are central; topics include smoothing techniques, trends/seasonalities, regression, econometric models. **(F)**. PREREQUISITE: INSE 3640.

4644. Inventory and Queueing. (3). Graphical representations of arrivals, storages, delays, and departures; time-dependent demand, and pulsed processes; deterministic analyses of simple systems; applications from service and manufacturing. **(Sp)**. PREREQUISITE: INSE 3640.

4670. Quality Assurance and Reliability. (3). Data display and reduction; sampling techniques; economics of sampling, quality by design; network and component reliability; applications in equipment management. **(Sp)**. PREREQUISITE: INSE 3640.

4672. Work Measurements. (3). Topics included are: performance standards, job evaluation, work sampling, process capability, time and motion studies. **(F)**.

4674. Production Systems. (3). Overview of common and leading edge manufacturing processes; system design and evaluation; modeling CIM, MRP, JIT, group technology, and TQM, project management. **(Sp)**.

4676. Facilities Planning. (3). Systems design and evaluation; development and use of computer support tools; line balancing, conveyor systems, integrated material control systems. **(F)**

4678. Logistics. (3). Logistic design and analysis; storage and retrieval, and inventory management systems; use of computer condor systems is emphasized; automated mechanisms discussed **(Sp)**

4690. Seminar. (1-3). Presentations by faculty, members of local industry, and upper division and graduate students. *May be repeated for up to 6 hours credit* **(F, Sp)**.

4691. Project. (3). Design and analysis of a systems engineering problem: evaluation of criteria and objectives; includes final oral and written reports. PREREQUISITE: Must be taken in final semester. **(F, Sp)**

ELECTRICAL ENGINEERING

ASSOCIATE PROFESSOR
BABAJIDE O. FAMILONI, *Chair*
Room 206B, Engineering Building
http://www.ee.memphis.edu/

ELECTRICAL ENGINEERING (ELEC)

1202. Electrical Engineering Concepts. (3). Introduction to basic electrical engineering concepts and models. DC circuits. Introduction to computers and computer ethics; use of text processors and spreadsheets. PREREQUISITE: MATH 1211 or 1213.

1207. Electrical Engineering Computations. (3). Structured solutions to electrical problems through use of computers. PREREQUISITE: ELEC 1202 or sophomore standing.

2201. Circuit Analysis I. (4). Fundamental properties of electrical circuits; basic concepts and circuit elements; analysis methods and network theorems; analysis of transient circuits using differential equations. *Three lecture, three laboratory hours per week.* COREQUISITES: MATH 3391. PREREQUISITES: MATH 2322, ELEC 1202.

2222. Digital Circuit Design. (4). Review of number systems and base conversions. Analysis and design of digital circuits. Logic and sequential design. Introduction to microprocessors. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 1207.

2281. Electrical Engineering and Instrumentation Laboratory. (1). Introduction to basic meters, power supplies, and test equipment. Transient responses and AC power measurements. Operational amplifier circuits, bridge circuits, and transducers. Electrical Engineering majors may not use ELEC 2281 to fulfill degree requirements. *Three laboratory hours per week.* COREQUISITE: ELEC 2283.

2283. Electrical Engineering and Instrumentation. (3). Analysis of electric circuits, sinusoidal steady state analysis, instrumentation circuits, op amps, and transducers. Electrical Engineering majors may not use ELEC 2283 to fulfill degree requirements PREREQUISITES: MATH 2322, PHYS 2004, 2520.

3201. Circuit Analysis II. (4). Laplace transform techniques for network analysis, sinusoidal steady-state response of single and three phase circuits, resonant circuits, linear transformers and magnetic coupling, and introduction to filter design. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 2201, MATH 3391.

3202. Transform Methods in Network Analysis. (3). Introduction to transform theory: Fourier Series; application of Fourier, Laplace and Z-transforms to solution of network problems. PREREQUISITE: ELEC 2201, MATH 3391.

3203. Electrical Engineering Computation. (3). Applications of differential equations to modeling physical systems. Solution and interpretation of systems of equations. Computer modeling and interpretation. PREREQUISITES: PHYS 2004, 2520; MATH 2322.

3211. Electronics I. (3). Solid state devices as elements of electronic circuits; linear models and linear operation of these devices emphasized. PREREQUISITE: ELEC 2201.

3212. Electronics II. (4). Utilization of devices in linear, non-linear, and switching modes of operation. Modeling and simulation of electronic circuits. *Three lecture, three laboratory hours per week.* PREREQUISITES: ELEC 2222, 3201, 3211, 3213.

3213. Electronics I Laboratory. (1). Emphasis on laboratory techniques in performance of basic electronic experiments. COREQUISITE: ELEC 3211.

3220. Computer Software Engineering. (3). Introduction to software engineering. Metrics, estimation, and planning. System and software requirements analysis. Software design and implementation techniques. Software integrity issues—quality assurance, testing, reliability and maintenance. Software development tools. PREREQUISITE: ELEC 1207 and either ELEC 3221 or permission of instructor.

3221. Matrix Computer Methods in Electrical Engineering. (3). Fundamentals of matrix theory; application of matrix theory and digital computer techniques to the solution of circuit problems. State equations and their application to the solution of systems of differential equations. PREREQUISITE: 2201.

3240. Electromagnetic Field Theory I. (3). (4211). Maxwell's equations electrostatics, magnetostatics and time varying electromagnetic fields and waves. PREREQUISITE: MATH 3391 **[C]**

4201. Energy Conversion. (3). Energy conversion by electromechanical processes, energy relations in magnetic systems, mathematical modeling of magnetic systems, transformers and electrical machines. PREREQUISITE: ELEC 3201 or 2283. **[C]**

4202-6202. Electrical Power Systems. (3). Investigation of problems associated with transmission of electrical energy. Load-flow studies, and fault analysis by use of symmetrical components. PREREQUISITE: ELEC 3221.

4203. Energy Conversion Laboratory. (1). Fundamental properties associated with testing and utilization of direct current and of alternating current equipment such as motors, generators, alternators and transformers. COREQUISITE: ELEC 4201.

4204-6204. Power Distribution Systems. (3). Distribution of power from transmission systems to users; primary and secondary feeders, voltage regulation; distribution transformers; overhead, underground and network distribution system design; lightning phenomena and protective device coordination. PREREQUISITES: ELEC 4201, 4203.

4212-6212. Electromagnetic Field Theory II. (4). Plane waves. Steady state and transient solutions of transmission line equations. Steady state solutions to waveguide equations. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 3240

4213-6213. Antenna Theory and Design. (4). Theory of operation and design of antennas. Determination of antenna radiation characteristics. Introduction to antenna array theory. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 3240.

4221-6221. Electronics III. (4). Applications of analog and digital electronic circuits. Special purpose circuits and devices. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 3211.

4222-6222. Digital Logic and Computer Design. (3). Applications of digital system design using MSI, LSI, and VLSI circuits. Design of arithmetic logic units, multiple-input controllers, and practical interfacing techniques. PREREQUISITE: ELEC 2222.

4223-6223. Electrical Engineering Instrumentation. (4). (3222). Transducers for physical systems. Mechanical, temperature, acoustic, and biomedical transducers. Methods of processing and analyzing data. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 3212.

4230-6230. Data Communication Systems. (3). Data communications in information and computing systems. Analog and digital means of transmitting and controlling information. Organization and requirements of data communication systems including modulation and demodulation, multiplexing, switching, error detection and correction. PREREQUISITE: ELEC 3202.

4231-6231. Communication Theory. (3). Frequency and time domain. Modulation, random signal theory, autocorrelation; noise, communication systems. PREREQUISITE: ELEC 3202 or permission of instructor.

4232-6232. Discrete Signal Processing. (3). Introduction to discrete-time signal analysis. Includes discrete system concepts, discrete-time Fourier analysis, sampling of continuous-time signals, z-transform, and transform analysis of discrete time systems. Also, includes structures for discrete-time systems and discrete filter design techniques. PREREQUISITE: ELEC 3202.

4235-6235. Random Signal Analysis. (3). Analysis of signals using techniques of probability and statistics. Introduction to probability, random processes and statistics. Discrete signals and analog signals with random components are studied in time, spatial and frequency domains. Autocorrelation, cross-correlation and power spectra are applied to various signals. Effects of filters, both discrete and analog, are determined. PREREQUISITE: ELEC 3202.

4240-6240. Lasers. (3). Laser theory, analysis, and design. Quantum description of light generation, ray optics, cavity design, Gaussian beams, and optical resonators. Laser survey.

4241-6241. Solid State Physical Electronics. (3). Quantum concepts; statistics; crystal structure; conduction processes in solids; p-n junctions and devices; field-effect devices; charge transfer devices. PREREQUISITES: ELEC 3211, 3240.

4242-6242. Electro-Optics. (3). Classical optics including Gaussian optics, Newtonian optics, and vergence theory. Optical design with aberration concepts, F-numbers, pupils, and stops. Radiometry with respect to flux transfer calculations. Light sources and detectors.

4243-6243. Linear Optical Systems. (3). Review of Fourier techniques for analysis and design of linear systems, extension to 2-dimensional techniques, 2-dimensional transform applied to linear optical systems and optical data processing. PREREQUISITE: ELEC 3202.

4251-6251. Control System Engineering. (3). General equations of physical linear systems and their transfer functions. Transient analysis and stability of servo systems. The Bode plot, Nichols chart, Nyquist plot, Routh criterion, root locus methods, introduc-

tion to compensation techniques and systems in state space. PREREQUISITES: ELEC 3202, 3221.

4252-6252. Digital Control Systems. (3). Problems and analysis techniques applicable to digital control systems. Prior knowledge of Laplace transforms required; basic knowledge of feedback control theory desirable. PREREQUISITES: ELEC 3202, 3221.

4253-6253. Control Systems Laboratory. (1). Investigations of fundamental properties associated with control systems engineering. Laboratory procedures in analysis of control systems, compensating networks, analog and digital computer simulations. COREQUISITE: ELEC 4251 or 4252.

4254-6254. Digital Control Systems Laboratory. (1). Investigations of fundamental properties associated with digital control systems engineering. Laboratory procedures in analysis of digital control systems, compensating networks, digital computer simulations and PLCs. COREQUISITE: ELEC 4252.

4261-6261. Introduction to Network Synthesis. (3). Design, simulation, and realization of active filter networks with emphasis on sensitivities, tolerances, and implementation. PREREQUISITE: ELEC 3202.

4270-6270. Introduction to Microprocessors. (4). LSI circuitry, microprocessor architecture, hardware and software, application and system design. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 2222.

4271-6271. Computer Interfacing. (3). Hardware and software aspects of connecting computers to peripherals, including tradeoffs between hardware and software. Connecting CPUs to ROM, RAM, parallel ports and serial ports. Applications of serial and parallel ports. Backplane buses, displays, keyboards, A/D and D/A converters. Linking interface routines to application software. PREREQUISITE: ELEC 2222 or permission of instructor.

4272-6272. Engineering Software. (3). Introduction to hierarchical operating systems; C programming language. PREREQUISITE: ELEC 3221 or permission of instructor.

4274-6274. Software Design with Ada. (3). Introduction to Ada. Detailed software design methodology using structured and object oriented techniques for large systems. Reusable components, Ada Programming Support Environment. PREREQUISITE: knowledge of a structured high level language.

4280. Electrical Engineering Design. (3). Individual and/or team design projects that require creative application of electrical engineering concepts. Oral and written presentations required. PREREQUISITES: ENGL 3603, ELEC 3202, and either 3212 or 4221. **[W, I]**.

4720-6720. Introduction to Artificial Intelligence (3). (Same as COMP 4720-6720). Fundamentals of programming in LISP. Central ideas of artificial intelligence, including heuristic search, problem solving, slot-and-filler structures, and knowledge representation. PREREQUISITE: Permission of Instructor, ELEC 3221.

4730-6730. Expert Systems. (3). (Same as COMP 4730-6730). Fundamentals of programming in PROLOG, central ideas of expert system development, including knowledge representation, control structures, tools, knowledge acquisition, and knowledge engineering. PREREQUISITE: Permission of instructor, ELEC 3221.

4900-09-6900-09. Special Topics In Electrical Engineering. (1-3). Topics are varied and announced in *Schedule of Classes.*

4910-19. Honors Special Topics. (3). Topics vary and are announced in the *Schedule of Classes.* PREREQUISITE: Approval by the Honors Committee of the Department of Electrical Engineering.

4991. Electrical Engineering Projects I. (1-3). Independent investigation of problem selected in consultation with instructor; report required. PREREQUISITE: senior standing with a minimum GPA of 2.0 in ELEC courses completed at The University of Memphis.

4992. Electrical Engineering Projects II. (1-3). Design, construction and testing of project investigated in ELEC 4991; report required. PREREQUISITE: ELEC 4991 with a minimum GPA of 2.0 in ELEC courses completed at The University of Memphis.

4993. Research Studies. (3). Consultation, reading, laboratory and design work to investigate selected areas of electrical engineering under supervision of faculty member. Formal paper required. Emphasis on laboratory work, design, and scientific writing. **[I, W]**.

4998. Honors Research Studies. (3). Consultation, reading, laboratory and design work to investigate selected areas of electrical engineering under the supervision of a faculty member. This course is for preliminary research leading to an Honors Thesis (ELEC 4999). A formal paper of results is required. PREREQUISITE: Approval by the Honors Committee of the Department of Electrical Engineering.

4999. Honors Thesis. (3). Under the direction of a faculty member, the student writes and defends a thesis based upon background reading and experimental research on a topic in electrical engineering. PREREQUISITE: Approval by the Honors Committee of the Department of Electrical Engineering.

ENGINEERING TECHNOLOGY

ASSOCIATE PROFESSOR
RONALD LEE DAY, *Chair*
Room 203, Engineering Technology Building
http://www.people.memphis.edu/~engtech/home.html

TECHNOLOGY (TECH)

1010. Computer Applications In Technology. (3). Introduction to computer applications using microcomputers networked to Tiger LAN and VAX. Microcomputer applications include operating systems, spreadsheets, word-processing, BASIC, and VAX/Internet.

1210. Pascal Programming. (3). Computer usage in engineering technology; emphasis on use of Pascal programming in solving technical problems. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1010 or BASIC programming and MATH 1213.

1411. Introduction to Technology. (1). Emphasis on engineering technology programs as to content and opportunities upon graduation; technical applications, calculations and activities related to various technological disciplines; approaches to basic research techniques and problem solving.

1521. Graphics and Descriptive Geometry. (3). Orthographic projections, sections, pictorials. Drafting with instruments, sketching, and introduction to computer aided drafting. Auxiliary views and revolutions, profiles, vector graphics and developments. *Two lecture, three laboratory hours per week.*

1555. History of Architecture. (3). Major trends in architecture from prehistoric times to present. Emphasis on impact of technological and social changes on prevailing architectural styles.

1561. Building Assembly. (3). Comprehensive study of building types and building systems; emphasis on the effect of scale, materials, assembly systems and detail methods upon architectural design; manual drafting of details included. *Two lecture, two laboratory hours per week.* PREREQUISITE: TECH 1521.

1711. Manufacturing Processes I. (3). Metal manufacturing processes, including traditional machining, computer numerical control, and thermal metal cutting/joining. Measurement, layout, and inspection techniques as applied to integrated manufacturing systems. Coverage of threads, fasteners, and geometric dimensioning and tolerancing. *Two lecture, three laboratory hours per week.*

1811. Electronic Circuit Technology. (3). Fundamental electronic theory and circuit analysis methods. Laboratory emphasis on safety, measurement and confirmation of mathematical solutions. *Two lecture, three laboratory hours per week.* PREREQUISITE: MATH 1213, TECH 1010.

2230. Pulse and Digital Circuits. (4). Analysis and design of pulse and digital electronic circuits using discrete transistors. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 2821.

2251. Advanced Programming Techniques. (4). Principles of computer programming applicable to engineering technology using C. Algorithmic problem solving, coding in a structured high level language, subprograms and parameters, control structures, I/O, complex arithmetic, and double precision operations emphasized. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 1210. COREQUISITE: TECH 3044.

2261. Data Structures. (4). (4251, 3251). Application of high speed digital computer to problems associated with storage and retrieval of numeric and non-numeric data in engineering systems. Includes representation and organization for storing of data, searching and sorting techniques, decision tables, and file maintenance techniques. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 2251.

2451. Introduction to Surveying. (3). (1451). Surveying practices, calculations, and use of topographical conventions. *Two lecture, three laboratory hours per week.* PREREQUISITE: MATH 1213.

2555. Architectural Design I. (4). Architectural schematics and design presentation. Studio course emphasizing sketching, design studies, model building and freehand drawing. Principles of graphic communication, including sketching, lettering, perspective, 3-dimensional forms employing light, shade and shadow. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 1521.

2556. Site and Environmental Planning. (3). Building sites; selection and utilization, including environmental influences. Technical aspects such as zoning, contour lines, parking, ingress/egress, site drainage, building location and landscaping. *Two lecture, two laboratory hours per week.*

2561. Computer Applications in Architecture. (3). (3561). Computer aided drafting and design applications to produce computer generated architectural design and working drawings. *Two lecture, three laboratory hours per week.* PREREQUISITES: TECH 1010, 1521, 1561.

2812. Basic Industrial Control Devices. (3). Theory and applications of devices commonly used in modern industrial control; including transistors, operational amplifiers, thyristors, and solid-state logic. Applications and characteristics of motors and control system I/O devices. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1811.

2813. Industrial Control Systems. (3). Theory and operation of logic control systems; including relay ladder logic, solid-state logic, and programmable logic controllers. Emphasis on practical industrial applications. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2812.

2821. Solid-State Technology. (3). Theory of solid-state devices with application in power supplies, amplifiers, and other basic electronic circuits. Solid-state diodes and bipolar junction transistors emphasized. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1811.

2831. Advanced Solid-State Technology. (3). Theory of field effect transistors and operational amplifiers. Emphasis on practical applications, including amplifiers, filters, and oscillators. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2821.

3044. Analysis for Engineering Technology. (4). (2944). Application of mathematical, scientific, and engineering principles to solution of technology problems, using a variety of examples from various major areas in Technology. Students analyze and provide acceptable solutions to ascending order of well designed problems using language and techniques or related technological disciplines and selected areas of mathematics, such as algebra, trigonometry, calculus and differential equations. *Three lecture, three laboratory hours per week.* PREREQUISITE: MATH 1321. **[C]**.

3232. Digital Technology. (3). Numbering systems and codes, logic gates, Boolean algebra, Combinational logic, TTL circuits, and memory devices. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2230.

3233. Microprocessor Technology. (4). Computer history and architecture. Microprocessor and microcomputer operation. Fetching and executing instructions. Microcode. Microprocessor registers. Memory addressing modes. Assembly-language instructions. Assembler operation. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3232.

3251. Assembly Language Programming. (4). (4251). Microcomputer programming using assembly language instructions, DQS function calls, and BIQS functions. Microprocessor architecture. Using an assembler to create executable files from assembly language programs. Text and graphic displays using assembly language programs. Application programs for input-output devices. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3233.

3281. Computer Aided Circuit Design. (4). Utilization of commercially available software for electronic circuit documentation, analysis and design. Emphasis on schematic capture, printed-circuit board design, and circuit simulation. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 2831.

3386. Occupational Safety. (3). (3387). Hazards and safety procedures for general industry and construction.

3401. Strength of Materials. (3). Force systems and their solution; that branch of mechanics dealing with forces and effects of forces acting upon rigid and deformable bodies at rest. Analysis of structural materials. COREQUISITES: TECH 3044, PHYS 2001, 2110.

3408. Industrial Materials (4). Material properties and the methods and standards used in testing these properties are introduced for metals, ceramics, polymers, and composites. Emphasis is placed on their mechanical properties and reinforced by testing in the laboratory. *Three lecture, three laboratory hours per week.* PREREQUISITE or COREQUISITE: TECH 3401.

3414. Construction Administration. (3). Ethical practice, social responsibility, licensing, codes, and public regulation of contracting, specification writing and interpretation, functions of architect-engineer and owner, construction contracts, bonding, insurance, indemnification, labor agreements and jurisdictional procedures, joint venture and subcontract relationship.

3421. Manufacturing Processes II. (3). Processes and techniques used to fabricate industrial materials into useful products. Techniques covered include casting and molding, forming, separating, conditioning, assembling, finishing, and process design and control. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1711.

3440. Project Cost Evaluation. (3). Industrial as well as personal financial situations and how they are affected by interest rates and "Time Value" of money. Investigation of economic alternatives including applications of existing formulas, techniques, and methods.

3451. Construction Surveying Methods. (3). Methods, techniques and formulas necessary to establish controlling points at any construction site. Both office and field procedures required to locate centerlines and bounds of structures. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2451.

3462. Industrial Statistics. (3). Procedures for collecting, describing, presenting and statistically analyzing industrial data. Basic probability theory. Hypothesis testing and basic concepts of analysis of variance. Introduction to Taguchi methods. PREREQUISITE: MATH 1211 or higher (except MATH 1601).

3471. Structural Design I. (3). Fundamentals of structural design and analysis of steel and timber buildings and building components. PREREQUISITES: MATH 1321, TECH 3401, 3408. **[C].**

3472. Structural Design II. (3). Fundamentals of structural design and analysis of concrete buildings and building components. PREREQUISITES: MATH 1321, TECH 3401, 3408.

3520. Architectural Design II. (4). Basic design concepts and methods as applied to building types, design, construction, and systems for residential architecture. *Three lecture, three laboratory hours per week.* PREREQUISITES: TECH 1561, 2555.

3531. Environmental Control Systems. (3). Studies in environmental technologies in architecture; mechanical systems, plumbing, electrical and energy conservation.

3562. Advanced Computer Applications in Design. (3). Advanced concepts of computer generated drawings including LISP programming, screen menu and keyboard macro modification, utilization of third party software for special applications, icon creation, 3-dimensional wire mesh, shading, slide presentation, and data exchange to other software. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2561 or equivalent.

3573. Dynamics and Design for Automation. (3). Analysis of rectilinear and curvilinear motion; kinematic analysis of mechanisms; mechanical, hydraulic, and pneumatic systems; product design techniques as applied to integrated manufacturing systems. Laboratory exercises include applications of programmable logic controllers and fluid power circuits. *Two lecture, three laboratory hours per week.* PREREQUISITES: TECH 3044, 3401.

3691. Construction Estimating. (3). Fundamentals of commercial and light frame estimating. Emphasis given to conducting a quantity survey, including unit and overhead costs. PREREQUISITE: TECH 3520.

3811. Electronics Communications. (3). Principles of noise, oscillators, modulation and vacuum tube power amplifiers with associated circuitry. Transmission line and antenna theory. Emphasis on operating frequencies up to UHF. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2831.

3812. Advanced Electronic Communications Technology. (3). (4811). Concepts, systems and practical applications in generation, transmission and detection of aural, data and visual information in analog and digital form. PREREQUISITE: TECH 3811.

3821. Industrial Electronics. (3). Electronic circuits and systems in modern industry. Principles of open and closed loop control systems. Theory and application of devices and thyristors such as unijunction transistors, silicon controlled rectifiers, diacs and triacs. *Two lecture, three laboratory hours per week.* PREREQUISITES: TECH 2831, 3044.

3822. Programmable Logic Controllers. (4). Theory and operation of programmable logic controllers. Emphasis on practical industrial applications and programming techniques. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3821. COREQUISITE: TECH 3841.

3841. Electrical Power and Motor Control. (3). Generation and utilization of AC and DC electrical power. Applications and operating characteristics of motors, generators and transformers with emphasis on control of motors. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 3821. COREQUISITE: TECH 3822.

3940. Analytic Approaches to Public Fire Protection. (3). Systems analysis and its use and limitations in fire protection and other problem areas. Illustrated with case studies and models using the systems approach to fire suppression and prevention. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology. **[C].**

3942. Fire Related Human Factors. (3). Dynamics of human behavior in fire incidents related to building design, codes and ordinances, and other fire prevention practices. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology.

3944. Fire Protection Structure and Systems Design. (3). Design principles involved in protection of structure from fire involvement. Empirical tests and prediction procedures. Control detection, and suppression system design practices. Fundamentals of hydraulic design of sprinkler and water spray systems with recent innovations. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology.

3945. Incendiary Fire Analysis and Investigation. (3). Procedures and techniques for collection, comparison, and analysis of physical evidence related to fire origin; principles of evidence of ignition phenomenon and propagation variables; legislative, economic, psychological, and sociological variables of incendiary fire, role of insurance and government programs. PREREQUISITE: students of B.P.S. degree in Fire Administration or Fire Prevention Technology program.

3946. Fire Dynamics. (3). Fire propagation phenomenon in both fuel and air regulated phases; variables in pre- and post-flashover fire development; geometric, material, gaseous, fluid flow, and thermodynamic parameters; compartment and building fire models. PREREQUISITE: student of B.P.S. degree in Fire Administration or Fire Prevention Technology program.

3947. Applications of Fire Research. (3). Fire research and its application; transfer and implications of available research results for fire prevention and protection programs; national and international studies and research developments. PREREQUISITE: student of B.P.S. degree in Fire Administration or Fire Prevention Technology program.

3948. Managerial Issues in Hazardous Materials. (3). Examination of federal regulatory issues, hazard identification and vulnerability analysis, multi-agency contingency planning, response personnel, multi-agency response resources and systems. Discussion of agency policies, public education and emergency information systems, health and safety issues, command post dynamics, strategic and tactical considerations, recovery and termination procedures. PREREQUISITE: enrollment in B.P.S. degree in Fire Administration or Fire Prevention Technology program.

4234. Microprocessor Interfacing Technology. (4). Analysis and design of microprocessor based hardware and software. Interfacing microprocessors to volatile and non-volatile memory devices and to parallel and serial input/output devices using digital logic devices. Assembly language programs are used to verify operation of the hardware. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3233.

4235. Microcomputer Systems. (4). Design and construction of complete microcomputer system including microprocessor, RAM, EPROM, input-output devices, and assembly language operating system. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 4234. **[I].**

4261-6261. C++ Programming. (4). Applications of the C++ programming language to problems from selected areas of engineering technology. Includes data collecting, modeling techniques, constraints, program development and validation, and interfacing with peripherals and machine language. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 2261. COREQUISITE: TECH 3251.

4272-6272. Operating Systems and Data Communications. (4). Introduction to operating system principles and data communications; includes networking of computers. Emphasis on hardware and software interaction in overall system. *Three lecture, three laboratory hours per week.* PREREQUISITES: TECH 3233, 3251.

4381. Principles of Supervision. (3). Functions of supervisory personnel.

4460. Work Design, Improvement and Measurement. (3). Elimination of waste in production or service environment. Continuous improvement and Single- Minute Exchange of Die (SMED) systems. Fundamentals of human factors and ergonomics. Work measurement by stop-watch, standard data, basic motion times and work sampling.

4462. Statistical Quality Control. (3). Statistical methods for analyzing quality problems including control charts for variables and attributes and industrial sampling. Defect prevention using the Poka-Yoke

System. Computer applications to quality assurance. **[C]**.

4464. Production Control Systems. (3). Functions of controlling production using Manufacturing Resource Planning (MRP II) and Just-in-Time (JIT) techniques. CQREQUISITE: TECH 4460.

4466. Facility Design. (3). Integrated approach to design and layout of industrial facility with respect to workstation location and material handling. Design considerations include project planning, costs, automation, CAD/CAM, quality, work measurement, safety, materials and processes, production control and tool design. Use of simulation software. PREREQUISITE: TECH 4464.

4472-6472. Computer Aided Drafting and Design. (3). Qverview of CADD technology, hardware and software options, two and three dimensional principles, and applications to produce computer generated design and working drawings. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1521 or equivalent.

4474-6474. Automation and Robotics. (3). (4476). Concepts of factory automation and industrial robotics. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1010 or 1210.

4476-6476. Computer Aided Manufacturing. (3). (4474). Computer numerical control programming by manual data input and distributed numerical control by computer assistance. System assessment of CNC machines and components for integrated manufacturing environment. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 3281 or 4472.

4510-6510. Construction Planning and Scheduling. (3). Principles of planning, scheduling, organizing, and controlling construction projects. Studies in critical path method (CPM) and PERT, with resource leveling and financial scheduling. Computer applications in CPM and PERT emphasized.

4512. Soil Technology in Construction. (3). Soil technology as applied to construction field. Fundamental properties of soils with application to foundations, highways, retaining walls and slope stability. Relationship between soil characteristics and geologic formations. *Two lecture, three laboratory hours per week.* PREREQUISITE: PHYS 2001, 2110.

4515. Architectural Design III. (4). Design synthesis. Integration of design determinants and development of macro and micro building concepts for commercial, institutional and residential architecture. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3520.

4520-6520. Construction Methods and Equipment. (3). Theory and practice of construction operations, equipment utilization, construction methods, analysis of costs, crew and equipment.

4535-6535. Project Manual and Codes. (3). Bidding and contractual documents, including technical specifications and their effect on design and practice of architecture; examination of general and local codes and regulations that influence design and construction of buildings. PREREQUISITE: senior status.

4571. Tool Design. (3). Design of tooling systems for the integrated manufacturing environment; emphasis on geometric dimensioning and tolerancing, fast change-over techniques, and achieving world class quality through tooling design. *Two lecture, three laboratory hours per week.* PREREQUISITES: TECH 3421, 4472.

4600. Contract and Construction Drawings. (4). Techniques and methods of portraying information needed to conform to document design decisions. Development of building systems, structural and construction details required to communicate clearly and graphically a project's bidding, contracting, and construction requirements. *Three lecture, three laboratory hours per week.* PREREQUISITES: TECH 3562 or equivalent, TECH 4515.

4615. Architectural Design IV. (4). Design synthesis. Integration of design determinants, structure, environmental controls, materials and construction. Independent architecture studies are combined wtih advanced design, design/reserch thesis. *Three lecture, three laboratory hours per week.* PREREQUISITES: All other architectural TECH courses. CQREQUISITES: TECH 4535, 4600.

4821. Microwave Technology. (4). Generation and transmission of energy at frequencies above 300 megahertz, emphasizing techniques and equipment which contrast sharply with those at lower frequencies. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3811.

4823. Advanced Programmable Logic Controllers. (3). Advanced applications of programmable logic controllers, including analog I/Q techniques and computer interfacing. *Two lecture, three laboratory hours per week.* PREREQUISITES: TECH 3822, 3841.

4841. Video Communications. (3). Theory and application of technical equipment for generation, transmission, and reception of video signals, both closed circuit and broadcast. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 3811.

4944. Senior Thesis. (3). Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. PREREQUISITE: seniors within two semesters of graduation **[W, I]**.

4950-6950. Product Safety Management. (3). (3921, 3931). Study of modern concepts of accident prevention by means of safety analysis. Analyses of responsibilities and requirements of management in producing safe consumer products. Emphasis on electrical and mechanical hazards.

4990-4998. Engineering Technology Topics. (1-3). Varied topics announced in the *Schedule of Classes. May be repeated by permission for a maximum of 6 hours.* PREREQUISITE: permission of instructor.

MECHANICAL ENGINEERING

ASSOCIATE PROFESSOR
JOHN I. HOCHSTEIN, *Interim Chair*
Room 312A, Engineering Building
http://www.me.memphis.edu/default.htm

MECHANICAL ENGINEERING (MECH)

1307. Mechanical Engineering Computing. (3). Emphasis on computer solutions of mechanical engineering problems.

1395. Honors Studies. (1). Participation in scholarly activities such as research and design programs within the college under the supervision of a faculty mentor. Successful completion requires the mentor's acceptance of a report documenting the student's accomplishments. PREREQUISITES: Admission to the Honors Program. *Note: This course is intended for students in their first year of academic study and may be repeated for a maximum of three credits.*

2308. Engineering Graphics. (3). (1308, ENGR 1021). Drafting techniques as used in engineering practice. Introduction to AutoCAD. CQREQUISITE: MECH 1307.

2332. Dynamics. (3). Kinematics and kinetics of particles and rigid bodies. PREREQUISITE: CIVL 2131. CQREQUISITE: MATH 3391.

2395. Honors Studies. (1). Participation in scholarly activities such as research and design programs within the college under the supervision of a faculty mentor. Successful completion requires the mentor's acceptance of a report documenting the student's accomplishments. PREREQUISITES: Admission to the Honors Program. *Note: This course is intended for students in their second year of academic study and may be repeated for a maximum of three credits.*

3301. Engineering Analysis. (3). Mechanical Engineering applications of first and second order ordinary differential equations, Laplace transforms, and Fourier series to problems in the areas of heat transfer, vibrations, and fluid mechanics. PREREQUISITE: MATH 3391.

3310. Introduction to Thermal Systems. (3). Introduction to First and Second Laws of Thermodynamics and to conduction, convection, and radiation heat transfer with particular emphasis on engineering applications. Mechanical Engineering majors may not use MECH 3310 to fulfill B.S.M.E. degree requirements. PREREQUISITES: MATH 2322, PHYS 2004, 2520.

3311. Engineering Thermodynamics I. (3). Laws of thermodynamics and their applications to engineering problems. PREREQUISITES: MATH 2322; PHYS 2004, 2520.

3312. Engineering Thermodynamics II. (3). Applications of thermodynamics laws; emphasis on real gases, real gas mixtures, combustion, gas cycles and vapor cycles. PREREQUISITES: MECH 3311, CHEM 1122, 1132.

3320. Engineering Materials. (3). (3361). Nature of six main classes of materials: metals, polymers and elastomers, ceramics and glasses, semiconductors, superconductors and composites. Mechanical, thermal, electrical and electronic, magnetic and optical properties of materials. Environmental effects on performance of materials: creep, corrosion, oxidation. Methodology for selection of materials for named applications. PREREQUISITES: CHEM 1122, 1132. CQREQUISITE: PHYS 2004, 2520.

3321. Kinematics and Dynamics of Machines. (3). Velocity and acceleration analysis of linkages and mechanisms. Force analysis of linkages and mechanisms and machinery such as IC engines. Gyroscopic forces and moment-of-inertia determination. Dynamic balance of rotors and reciprocating masses. PREREQUISITES: MECH 2332, 3341; MATH 3391.

3322. Mechanics of Materials. (3). (Same as CIVL 3322). Analysis of components subjected to tension, compression, bending moment, torque; combined loading; Mohr's stress circle; deflection of beams; simple treatment of column buckling. PREREQUISITE: CIVL 2131.

3323. Mechanical Design and Analysis. (3). Methodology and practice in designing machine components by integrating principles from mechanics of materials, failure theory, fatigue, economics and other principles. PREREQUISITE: MECH 3322.

3325. Materials Laboratory. (1). Materials testing and evaluation. *Three laboratory hours per week.* PREREQUISITE: MECH 3320; PREREQUISITE or CQREQUISITE: MECH 3322.

3331. Mechanics of Fluids. (3). Statics and dynamics of fluids; applications to measurement of properties of water and air flows. PREREQUISITE: MECH 2332, 3311.

3335. Fluids Laboratory. (1). Principles of fluid mechanics are demonstrated and verified. Familiarization with instrumentation and techniques in organizing and reporting results of experimental investigations. *Three laboratory hours per week.* CQREQUISITE: MECH 3331.

3341. Mechanical Engineering Analysis. (3). Engineering methods, classical analysis, computer techniques, and their interactions with mechanical engineering problems. CQREQUISITE: MATH 3391. **[C]**.

3395. Honors Studies. (1). Participation in scholarly activities such as research and design programs within the college under the supervision of a faculty mentor. Successful completion requires the mentor's acceptance of a report documenting the student's accomplishments. PREREQUISITES: Admission to the Honors Program. *Note: This course is intended for students in their third year of academic study and may be repeated for a maximum of three credits.*

4300. Senior Seminar. (1). Ethics and professionalism, literature searching, proposal writing, technical paper presentations and other selected topics. Qral and written reports required. Taking the EIT exam is recommended. PREREQUISITE: senior status or consent of instructor.

4305-6305. Intermediate Fluid Mechanics. (3). Continuation of MECH 3331; introduction to various topics in advanced fluid mechanics, including: flow over immersed bodies; open channel hydraulics; compressible fluid flow; turbomachinery; measurements in fluid mechanics; and, inviscid flow. PREREQUISITE: MECH 3331.

4309-6309. Gas Dynamics. (3). Concepts in compressible flow, emphasis on real and ideal gas dynamic effects and non-equilibrium flow; application of numerical methods. PREREQUISITES: MECH 3312, 3331.

4311. Heat Transfer I. (3). Fundamentals of conduction, convection, and radiation heat transfer with emphasis on conduction and convection. Introduction to heat exchanger design. PREREQUISITES: MECH 3312, 3331, 3341.

4312. Power Generation. (3). Application of thermodynamics, fluid mechanics and heat transfer to design and operation of power plants. Includes economic operation of power generation, optimization of resources, and technical report writing. PREREQUISITE: MECH 3312. **[W]**.

4313-6313. Heat Transfer II. (3). Principles of boiling, condensing, and radiation heat transfer. Fundamentals of heat exchanger design. PREREQUISITE: MECH 4311.

4314. Fluid/Thermal Systems Design. (4). Design of piping systems; pipe size selection using economic; fluid meter selection; prime movers and piping systems; heat exchanger analysis, selection and design; economics of heat exchanger selection; analysis of fluid/thermal components as a system. Group project required. PREREQUISITE: MECH 4311. **[I]**.

4315-6315. Heating, Ventilation and Air Conditioning. (3). Psychrometric analyses, heating and cooling loads of buildings and analyses of air conditioning systems. PREREQUISITE: MECH 4311.

4320. Mechanics of Materials II. (3). Stress-strain analyses of thin-walled cylinders and spheres, springs, laterally-loaded struts, struts with initial curvature, rotating disks and cylinders; plastic yielding of beams and shafts; introduction to energy methods. PREREQUISITES: MECH 3320, 3322.

4322. Mechanical Design. (3). Analytical treatment of methods used in design process including creativity, probability, and optimization as applied to design process, from concept through preliminary design to final design. PREREQUISITE: MECH 3323.

4323. Machine Design. (4). Mechanical concepts and analyses applied to machine design. Integrating finite element method, statistical analyses and computer-aided design into design projects. Design projects accomplished through individual, team and class approaches. COREQUISITE: MECH 4322.

4324-6324. Computer Methods in Design. (3). Application of computer aided drafting packages to design of mechanical components and systems. Introduction to fundamental concepts and principles of finite element methods and design optimization. Design project assignments using computer-aided engineering software for analysis and design solution. PREREQUISITES: MECH 3323, 3341.

4325-6325. Advanced Mechanics of Materials. (3). Beams on elastic foundations, experimental stress analysis, torsion of non-circular sections, curved beam theory, unsymmetrical bending. PREREQUISITE: MECH 3322.

4326-6326. Biomedical Systems Analysis-Mechanical. (3). (3326). Introduction to concepts used in analyzing living systems. Simulation of body functions with mechanical and computer models. Familiarization with design of mechanical bioengineering devices such as heart valves, heart-lung machines, renal dialysis machines. PREREQUISITES: MECH 2332, 3322.

4330-6330. Introduction to Composite Materials. (3). Introduction to fiber reinforced composite materials. Includes mechanical behavior, strength, design methodology, and implementation of computer aided design. PREREQUISITES: MECH 3320, 3322, 3341.

4331. Turbomachinery. (3). Basic principles of fluid mechanics and thermodynamics with application to rotating devices. Ideal and actual operating characteristics of pumps, fans, turbines and compressors. Constraints on design of real systems. PREREQUISITE: MECH 3331.

4333-6333. Aerospace Propulsion Systems. (3). Fundamentals of airbreathing and rocket propulsion devices. Principles of combustion thermodynamics, gas turbine operation, solid and liquid propellants, performance evaluation, and atmospheric and space mission propulsion requirements. PREREQUISITE: MECH 3331.

4335. Thermodynamics and Heat Transfer Laboratory. (1). Instrumentation and measurement techniques used in thermodynamics and heat transfer studies. Experimental verification of basic principles with emphasis on organizing and reporting of results. *Three laboratory hours per week.* COREQUISITE: MECH 4311.

4337-6337. Internal Combustion Engines. (3). Principles of Otto and Diesel cycle engines. Effects of various fuels and fuel delivery systems, air induction systems, ignition systems, and pollution control techniques on engine performance. PREREQUISITES: MECH 3312, 3331.

4340-6340. Manufacturing Processes. (3). Introduction to manufacturing processes: fundamentals of mechanical behavior of materials, manufacturing properties of materials; casting, bulk deformation, sheetmetal forming, material removal processes; processing of polymers, ceramics and glasses, composite materials; powder metallurgy; fastening and joining processes; nontraditional manufacturing processes; economics of integrated design and manufacturing; recent developments in manufacturing. PREREQUISITES: MECH 3320, 3322.

4344. Mechanical Controls. (3). Fundamental classical control concepts. Modeling of linear mechanical control systems. Transient, accuracy and performance analyses and design of control systems using root locus sketch, Nyquist diagrams and Bode plots. PREREQUISITE: MECH 3321.

4345-6345. Design of Mechanisms. (3). Graphical and analytical mechanism synthesis techniques for path generation, function generation, rigid body guidance and optimization of force transmission characteristics. PREREQUISITES: MECH 3321, 4322.

4346-6346. Advanced Mechanical Controls. (3). Advanced design and modeling of mechanical control systems; review of digital and optimal control systems and simulation of control systems. PREREQUISITE: MECH 4344.

4350-6350. Mechanics for Biomedical Engineers. (4). Analyses of the bone and joint structure of the body related to the basic mechanical equations and properties. Mathematical modeling of bone structure, mechanical properties, static loading, dynamic loading, fatigue, wear, corrosion. PREREQUISITES: MECH 3320, 3322.

4360. Selection of Engineering Materials. (3). Detailed study of main classes of materials and their properties and uses; design criteria for various failure modes and selected environment case studies, technical tutorials and design exercises. PREREQUISITES: MECH 3320, 3322.

4365. Biomaterials. (3). Biocompatibility and biofunctionality. Materials for bone and joint replacement. Materials for the cardiovascular system. Materials and artifical organs. Dental restorative materials. Materials for drug delivery. Materials for ophthalmology. PREREQUISITES: MECH 3320, 3322.

4369. Process Heat Transfer. (3). Engineering concepts and fundamental principles dealing with single and two phase fluid dynamic and heat transfer to design and analysis of process heat transfer equipment. PREREQUISITE: MECH 4311.

4371-6371. Mechanical Vibrations. (3). Kinematics of harmonic and non-harmonic vibrations; system of one and several degrees of freedom, free and forced vibrations; self-excited vibrations. PREREQUISITES: MATH 3391; MECH 3321, 3341.

4391. Mechanical Engineering Projects. (1-3). Independent investigation of mechanical engineering problems in consultation with instructor. PREREQUISITE: senior standing.

4395. Honors Thesis Proposal. (3). Scholarly work in engineering requires advanced understanding in a particular field of study as well as the foundation in fundamental principles provided by the undergraduate curriculum. The student will work with an Honors Thesis advisor to identify a suitable thesis topic and to develop the advanced understanding required for scholarly study of that topic. A formal written and oral proposal must be accepted by the departmental honors committee for the successful completion of this course. PREREQUISITES: senior standing and approval by the departmental honors committee.

4396. Honors Thesis. (3). Original scholarly work is performed under the direction of an Honors Thesis advisor and reported in a thesis. Successful completion of this course requires an oral defense of the thesis and acceptance of the thesis by the departmental honors committee. PREREQUISITES: MECH 4395 and approval by the departmental honors committee.

The Loewenberg School of Nursing

TONI BARGAGLIOTTI, D.N.Sc., R.N., *Dean and Professor*
Newport Hall

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
*	Nursing		Bachelor of Science in Nursing (B.S.N.)

*The school is not composed of departments.

Individual program requirements described in the *Undergraduate Issue of the 1997-1999 Bulletin of The University of Memphis* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this bulletin; or consult the undergraduate bulletin website at: http://www.memphis.edu for the latest catalog updates.

PURPOSES

The primary function of The Loewenberg School of Nursing is to offer a program of study designed to prepare students for careers in professional nursing. As a part of a comprehensive university, the school is dedicated to developing scholarship in nursing and providing services that support the institutional mission. The program is designed to accommodate the needs of high school graduates, transfer students, college graduates, licensed practical nurses, and registered nurses who are graduates of diploma or associate degree nursing programs. The school is committed to: (1) providing a curriculum leading to the degree of Bachelor of Science in Nursing basic to beginning professional practice and graduate study in nursing; (2) promoting the intellectual, personal and professional development of students by offering a curriculum that combines a strong liberal education with the professional major; (3) providing a plan of study with flexible options that are responsive to the individual learner's needs; (4) encouraging the use of opportunities available in a comprehensive university setting to foster values, attitudes and personal qualities essential to living a fulfilling life and contributing to a diverse society, (5) producing politically and socially conscious graduates who are competent practitioners in a variety of settings; and (6) preparing graduates who assume leadership roles to effect change for a healthy society.

The faculty of the Loewenberg School of Nursing are clinician scholars who are dedicated to creating a community where each person is valued, supported, mentored, and recognized for contributions to past, present, and future health care and nursing education. We value our cultural and disciplinary diversity because the bridges of understanding we build to each other provide the foundation for excellence in clinical practice and in scholarly inquiry. We create a community of scholarliness, collegiality, and caring because it is the greatest legacy we give to those who seek to learn with and from us. Because our students are the future of health care for our global community, we freely share with them our passion for creativity, learning, excellence, empathic understanding, and caring for others. Our quest for excellence in nursing education will know no boundaries as we continually seek innovative approaches through the creative and scholarly work of our faculty and students. As a school within an urban university, our educational programs are inextricably linked in a responsive way to the community we serve. Our efforts are dedicated to our students, who are our greatest resource, and our hope for a future of health for all.

PROGRAM OBJECTIVES

Baccalaureate graduates of the Loewenberg School of Nursing:

1. Use nursing knowledge, theory, and research to provide culturally sensitive, cost effective nursing care to individuals, families, and communities.
2. Use the nursing process to promote adaptive health behaviors in individuals, families, and communities.
3. Use critical thinking skills derived from a synthesis of theoretical, empirical, and intuitive knowledge from other scientific disciplines and the humanities to formulate nursing judgment.
4. Collaborate with other health care providers and consumers to provide access to health care and promote the health and well-being of diverse people.
5. Incorporate professional values with ethical, moral, spiritual, and legal aspects of nursing practice.
6. Incorporate leadership and management skills with knowledge of political systems to enhance the quality of nursing and health practices.
7. Communicate effectively to implement the diverse roles of nursing with individuals, families, groups, communities and society.
8. Evaluate research and incorporate selected components and findings appropriately into nursing practice.
9. Assume responsibility and accountability for the continuing effectiveness of one's own nursing practice and professional development.
10. Participate in the implementation of nursing roles designed to meet the emerging health needs of the general public in a changing society.

ORGANIZATION

The Loewenberg School of Nursing is organized as one unit under the leadership of a dean. The curriculum leading to the degree of Bachelor of Science in Nursing includes general education and support courses offered through other units of the university as well as the major requirements offered by the school. A comprehensive approach to health care is emphasized through utilization of a wide variety of health care settings available in Memphis and the surrounding community.

The faculty of the Loewenberg School of Nursing represents all clinical areas of nursing practice and a variety of experiences and interests. They reflect this diversity in their teaching, practice and research and are qualified by practical experience as well as by academic credentials, to function as facilitators of learning.

The Loewenberg School of Nursing holds membership in the American Association of Colleges of Nursing, Southern Council for Collegiate Education in Nursing, and the National League for Nursing Council for Baccalaureate and Higher Degree Programs. The program is accredited by the National League for Nursing and approved by the Tennessee Board of Nursing.

ADMISSION AND ADVISING

Core performance standards for admission and progression:

A. Critical thinking ability sufficient for clinical judgement.
B. Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.
C. Communication abilities sufficient for interaction with others in verbal and written form.

D. Physical abilities sufficient to move from room to room and maneuver in small spaces.
E. Gross and fine motor abilities sufficient to provide safe and effective nursing care.
F. Auditory ability sufficient to monitor and assess health needs.
G. Visual ability sufficient for observation and assessment necessary in nursing care.
H. Tactile ability sufficient for physical assessment.

ADMISSION— BASIC STUDENTS

All basic students who wish to earn the Bachelor of Science in Nursing must be admitted to the Loewenberg School of Nursing. To be admitted to the school, a student must:

1. Be admitted to The University of Memphis as a degree-seeking undergraduate student.
2. Have a minimum college cumulative grade point average of 2.5, a cumulative of 2.4 in prerequisite sciences.
3. Have completed specified pre-nursing courses with a grade of C or better: ENGL 1101, 1102 (6); BIOL 1751/1752, 1761/1762 (8); MMCS 1451/1452 (4); CHEM 1101, 1102 (8); SOCI 1111 or PSYC 1101; CSED 2202 Nutrition; EDPR 2111 Development Across the Lifespan; Mathematics (3) selected from approved courses in the School of Nursing's General Education Section below.
4. Have a minimum score of 600 on the TOEFL (for students for whom English is a second language).
5. Have cleared all high school deficiencies.
6. Students who are transferring from another nursing program must submit a letter of good standing from the dean/director of the previous nursing program.
7. Complete and submit School of Nursing application for admission with The University of Memphis transcript and copy of The University of Memphis transfer credit evaluation (if applicable) to:
   Loewenberg School of Nursing
   The University of Memphis
   Newport Hall, Room 101
   Memphis, TN 38152

If there are more applicants than places available, acceptance will be based on the student's GPA and criteria specified in the written policies of the program.

CRITERIA:

1. Students must have complete files by the deadline (February 15 for Fall; October 1 for Spring) to be considered.
2. Acceptance into the school will be based on rank–order cumulative GPA.
3. If individuals have the same GPA, the order will be determined by the amount of prerequisite and support course work completed.
4. A new list will be created each semester. *Students who are not accepted must reapply for consideration the next semester.*
5. An alternate list will be established each semester to fill vacancies that might occur before the beginning of class. The criteria for the alternate list will be the same as for the acceptance list.

ADVANCED PLACEMENT ADMISSION—RN STUDENTS

To be admitted with advanced placement, the Registered Nurse must:

1. Be admitted to The University of Memphis as a degree-seeking undergraduate student.
2. Have current licensure as a Registered Nurse in Tennessee.
3. Submit evidence of recent clinical practice.
4. Have a minimum college cumulative grade point average of 2.5.
5. Have completed specified pre-nursing courses with a grade of C or better: ENGL 1101, 1102 (6); BIOL 1751/1752, 1761/1762 (8), MMCS 1451/1452 (4); CHEM 1101, 1102 (8); SOCI 1111 or PSYC 1101; CSED 2202 Nutrition; EDPR 2111 Development Across Lifespan; Mathematics (3) selected from approved courses in the School of Nursing's General Education selection below.
6. Must meet the Admission to Clinical Course Work requirements.

ACADEMIC ADVISING— BASIC AND RN STUDENTS

Students who are completing courses required for admission to The Loewenberg School of Nursing receive advising through the Academic Counseling Unit located in Scates Hall. The assistant to the dean of the school, however, will be happy to answer inquiries from students regarding admission requirements. Following admission to the School of Nursing, each student is assigned an advisor from the school. The advisor will assist the student in planning for completion of the BSN program and will provide the opportunity for meaningful discussion regarding academic progress and career goals. This assistance, however, does not in any way relieve the student of the primary responsibility for studying the *Catalog* and fulfilling all the requirements for the degree.

LOANS AND SCHOLARSHIPS

Students are encouraged to complete applications and forms for financial aid. These are available in the Student Financial Aid Office. Some scholarships are also available through The Loewenberg School of Nursing. See Section 3 of this bulletin for a list. Applications for scholarships are available in the school office.

RESIDENCY

University residence requirements are explained in detail in the *Graduation from the University* section of this catalog. Note that students transferring from a community or junior college must complete a minimum of sixty semester hours in an accredited senior institution. In addition, 33 of the last 66 semester hours for the degree must be completed at The University of Memphis.

DEGREE REQUIREMENTS

1. To qualify for the degree of Bachelor of Science in Nursing, the student must complete a minimum of 132 semester hours with the minimum overall grade point average of 2.0 and must meet specific grade requirements described below.
2. A minimum grade of C must be earned for English 1101 and 1102, each required science course, each required upper division course, and each required nursing course.
3. Detailed course requirements are described below under General Education Requirements, Other Support Course Requirements, and Nursing Course Requirements.

General Education Requirements

English Composition (6 hours): ENGL 1101,1102 with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312, 1321 (4), or 2000.

Literary Heritage (3 hours): ENGL 2201 or 2202.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 2860, 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 3900, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (6 hours): One course from list A and one from B:

A. (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/CSED 2101, UNIV 2304.

B. PSYC 1101, SOCI 1111.

Natural Science (8 hours – Sequence required): CHEM 1101, 1102 or CHEM 1121, 1131, 1122, 1132, with a minimum grade of C. (Completed in the past 7 years. Refer to Science Course Validation Section.)

Fitness and Wellness: (4 hours): HMSE 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2115/2120; NAVY 1100, 1104, 2204, 2206, 3000. Students completing NAVY 1100, 1104, 2206 and 2204 or 3000 will satisfy the entire 4-hour Fitness and Wellness requirement as will students completing the Advanced Course in Military Science (ARMY 3100, 3111, 3115, 3121, 4100, 4111, 4115, and 4121).

***Computation Intensive (3 hours):** EDPR 4541, PSYC 3001, or SOCI 3311.

***Writing Intensive (3 hours):** NURS 4110 or any approved writing intensive course.

***Integrative (4 hours):** NURS 4229.

Computer Literacy: COMP 1200, NURS 3003, a course approved by the dean, or satisfactory score on university-approved computer literacy examination.

* Under most circumstances, transfer courses may not be used to satisfy the requirements for a computation intensive, writing intensive, or integrative general education requirement. Credit by examination may not be used to fulfill these requirements.

Support Course Requirements

***Anatomy and Physiology (8 hours):** BIOL 1751/1752, 1761/1762

***Microbiology (4 hours):** MMCS 1451/1452

***Chemistry (8 hours):** See natural science requirement above.

Growth and Development: (3 hours): EDPR 2111.

Nutrition (3 hours): CSED 2202.

Statistics (3 hours): EDPR 4541 **[C]**, PSYC 3001 **[C]**, or SOCI 3311 **[C]**, with a minimum grade of C.

All support courses must be completed with a minimum cumulative grade of C.

*Science courses must have a minimum grade point average of 2.4 and must have been completed in the past 7 years. Refer to Science Course Validation section above.

Nursing Course Requirements – Basic Students

Nursing (60 hours): NURS 2217, 2218 (1), 2219 (2), 2220 (1), 3000, 3101, 3117 (3), 3118 (1), 3119 (2), 3127 (2), 3129, 3217 (2), 3219, 3227 (2), 3229, 3400, 4110 **[W]**, 4117 (2), 4119, 4120, 4127, 4129, 4227, 4229 (4).

Upper Division Elective (3 hours): Any 3000-4000 course.

Nursing Course Requirements – RN Students

Nursing (27 hours): NURS 3000, 3101, 3400, 4110, **[W]**, 4120 (2), 4127, 4129, 4327 (4), 4329.

Upper Division Elective (3 hours): Any 3000-4000 course.

The remaining hours for the major requirements are fulfilled by validation.

Under the Tennessee Career Mobility Plan registered nurses who have graduated from Tennessee schools or out-of-state NLN accredited programs will be able to progress to the baccalaureate degree in nursing without testing to verify previous nursing education. Registered nurses articulating to the baccalaureate level may be awarded or transfer in nursing credits equivalent to approximately one year of nursing courses. For this to occur, a grade of C or better must have been earned in previous nursing course work. Nursing credits transferred or awarded will be held in escrow. These credits will be placed on individual transcripts only after students have successfully completed 15 hours of nursing courses with a C or better in The Loewenberg School of Nursing. Non nursing credits are transferred according to university policies. Testing will be required for graduates of non NLN accredited programs or for students who have not been in active clinical practice in the past three years.

The following represent typical schedule plans for basic and RN students.

BASIC STUDENTS

FRESHMAN YEAR			
ENGL 1101	3	ENGL 1102	3
BIOL 1751/1752	4	BIOL 1761/1762	4
CHEM 1101	4	CHEM 1102	4
HMSE 1100	2	MATH	3
[1]Social Science	3	[1]Fine Arts Heritage	3
	16		17

SOPHOMORE YEAR			
ENGL 2201 or 2202	3	NURS 3400	3
MMCS 1451/1452	4	NURS 3101	3
EDPR 2111	3	NURS 2217	3
CSED 2202	3	NURS 2218	1
COMM 2381	3	NURS 2219	2
Physical Activity	2	NURS 3000	3
		NURS 2220	1
	18		16

JUNIOR YEAR			
NURS 3117	3	NURS 3217	2
NURS 3118	1	NURS 3219	3
NURS 3119	2	NURS 3227	2
NURS 3127	2	NURS 3229	3
NURS 3129	3	[1]Hist/Phil Heritage	3
[1]Social Science	3	[1]American Heritage	3
[1]American Heritage	3		
	17		16

SENIOR YEAR			
[2]Statistics	3	NURS 4110 **[W]**	3
NURS 4117	2	NURS 4227	3
NURS 4119	3	NURS 4229	4
NURS 4127	3	NURS 4120	2
NURS 4129	3	[1]Hist/Phil Heritage	3
Elective	3		
	17		15

[1] Refer to B.S.N. General Education requirements for approved courses.

[2] Take one of the following: EDPR 4541 **[C]**, PSYC 3001 **[C]**, SOCI 3311 **[C]**.

NOTE: PROGRESSION OF NURSING COURSEWORK: All courses in group A must be completed before enrolling in any courses in group B. All courses in group B must be completed before enrolling in any courses in group C.

A. Professional Foundation Courses: NURS 3101, 2217, 2218, 2219, 2220 (1), 3400, 3000.

B. Provider of Care Courses: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229.

C. Coordinator of Care Courses: NURS 4117, 4119, 4127, 4129, 4227, 4228, 4327, 4329, 4110, 4120.

RN (Upper Division Requirements)

SENIOR YEAR			
NURS 3000	3	NURS 4110 **[W]**	3
NURS 3101	3	NURS 4120	2
NURS 3400	3	NURS 4327	4
NURS 4127	3	NURS 4329	3
NURS 4129	3	Elective	3
*Statistics	3		
	18		15

* Take one of the following: EDPR 4541 **[C]**, PSYC 3001 **[C]**, or SOCI 3311 **[C]**.

Science Course Validation: If seven years have lapsed since credit was earned in BIOL 1751/1752 and 1761/1762 (Anatomy and Physiology), MMCS 1451/1452 (Microbiology), or CHEM 1101 and 1102, or CHEM 1121/1131 and 1122/1132, the content is considered outdated, and students are required to either repeat the course(s) or validate currency of knowledge. Validation of current knowledge may be accomplished by taking a higher level course in the same field or by examination. The NLN tests in Anatomy and Physiology, Chemistry and Microbiology are used for this purpose. A score at the fiftieth percentile or above is required. Registered nurses are required to submit evidence of recent clinical practice to validate currency of knowledge.

Progression in the Nursing Major:

1. A nursing course may only be entered twice.
2. A grade of "C" or better must be earned in each nursing course to progress. Failure to earn a grade of "C" will require repeating the course before attempting other nursing courses.
3. When the theory or clinical component of any course sequence must be repeated, the companion course must also be repeated even though a satisfactory grade has been earned.
4. Irregular progression students who are out of clinical nursing course work for longer than three months will be reviewed by the Student Progression Committee. The Committee may require testing or the repetition of courses in which satifactory grades have been earned.

Disqualification from the Nursing Major:

1. Failure to earn a grade of "C" or better when repeating a nursing course for a grade of less than a "C".
2. Failure to earn a satisfactory grade in a clinical course when repeating the course for an unsatifactory grade.
3. Failure to earn a "C" or "S" or better in two nursing courses.
4. Professional/academic misconduct or dishonesty.
5. Falsification of any academic/medical/nursing record or misrepresentation of nursing care or credential.
6. Clinical practice that willfully places patients in physical or emotional jeopardy.
7. Clinical practice while under the influence of alcohol or illegal substance.

Clinical Nursing Course Requirements: Before enrolling in a clinical nursing course, students must present evidence of current CPR certification, professional liability insurance ($1,000,000 per occurrence/$3,000,000 aggregate minimum coverage), appropriate immunizations and Titers, and a statement of good health, including a negative PPD skin test or chest x-ray. Immunizations and titers include DT, measles, mumps, polio, Hepatitis B; Rubella vaccine or titer showing immunity; varicela titer. The basic nursing student will pay for malpractice insurance at fee payment. RN students must purchase their own insurance and present evidence prior to enrolling in clinical nursing courses. RN students are also required to present evidence of current licensure in Tennessee.

Students are encouraged to complete these requirements during the semester prior to anticipated enrollment. No student will be allowed to participate in clinical learning experiences until these requirements are satisfied.

Credit By Exam: Credit for some of the upper division nursing courses may be earned through credit by examination. Other methods of earning credit are explained in detail in the *Academic Regulations* section of this catalog.

RN Licensure: Upon graduation from the program, graduates are eligible to take the NCLEX examination for licensure at testing sites determined by the Tennessee Board of Nursing.

Student Organizations: Students are encouraged to join their professional organization, Student Nurses' Association. This is the local chapter of the National Student Nurses' Association.

Senior students who have achieved a 3.0 cumulative grade point average and who are recommended by faculty are eligible to apply for induction into Sigma Theta Tau, Beta Theta Chapter at Large of the international nursing honor society.

Nursing Course Descriptions

NURSING (NURS)

*NOTE: In the repetition of NURS courses for the purpose of achieving a satisfactory grade, the theory and corequisite practicum courses are treated as one course. Both must be taken to improve the grade in either or both of the two courses. A maximum of one nursing course may be repeated. A student who drops or withdraws from a nursing course may re-enter that course only once.
Additional fees are charged for some Nursing courses. See the Schedule of Classes.

2217. Foundations of Nursing. (3). (2010). Introduction to nursing process and concepts basic to practice of professional nursing. Theory focus on development of nursing knowledge necessary for promotion of health and prevention of illness in individual. *Three lecture hours per week.* PREREQUISITE: admission to the Loewenberg School of Nursing. COREQUISITES: NURS 2218, *2219, 2220, 3000, 3101, 3400; HMSE 1100.

2218. Integrative Skills I. (1). (2010). Laboratory experiences focus on development of competency in performing basic clinical nursing procedures. *Three laboratory hours per week.* PREREQUISITE: admission to the Loewenberg School of Nursing. COREQUISITES: NURS 2217, 2219, 2220, 3000, 3101, 3400; HMSE 1100.

2219. Foundations of Nursing Practicum. (2). (2010 lab). Clinical experiences include provision of direct care of adult clients in secondary care and/or extended care settings. *Six clinical laboratory hours per week.* PREREQUISITE: admission to the Loewenberg School of Nursing. COREQUISITES: NURS *2217, 2218, 2220, 3000, 3101, 3400; HMSE 1100. (S/U).

2220. Dosage Calculation. (1). Introduction to systems of measurement used in medication administration. Focus on ability to determine safe dosages for all types of medications and intravenous fluids. *One lecture hour per week.* PREREQUISITES: Math Requirement; CHEM 1101, 1102.

3000. Pharmacology in Nursing. (3). Basic pharmacology of drugs in the major classifications; emphasis on action of a prototype on organ systems, its mechanisms of action, pharmacokinetics, toxicology and clinically important interactions with other drugs. PREREQUISITES: BIOL 1751/1752, 1761/1762, 1451/1452, CHEM 1101, 1102.

3001. Individualized Study. (1-3). Directed individualized approach to increase nursing knowledge, understanding, and skills according to student's needs and level objectives. Assessment of student determines content areas and clinical experience needed. *May be repeated for a maximum of 6 credit hours.* Credit not applied toward B.S.N. degree.

3003. Computers and Nursing. (3). Introduction to history of computers and information systems; emphasis on nursing practice and patient care applications; social, ethical, and legal issues; use and evaluation of software relevant to nursing; beginning programming.

3101. Health Assessment. (3). (3100). Comprehensive health assessment of clients across life span. Expands interviewing and history taking. Health assessment skills emphasized. *Two lecture, three laboratory hours per week.* COREQUISITES: NURS 2217, 2218, 2219.

3117. Adult Health Nursing. (3). (3010). Application of nursing process to adults experiencing problems of adaptation requiring nursing intervention in acute and/or chronic illness. Role of nurse in health promotion, restoration, and rehabilitation is emphasized. *Two lecture hours per week.* PREREQUISITES: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. CQREQUISITES: NURS 3118, *3119.

3118. Integrative Skills II. (1). (3010). Laboratory experiences focus on development of competency in performing complex clinical nursing procedures. *Three laboratory hours per week.* PREREQUISITES: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. CQREQUISITES: NURS 3117, 3119.

3119. Adult Health Nursing Practicum. (2). (3010 lab). Clinical experiences include provision of direct care of adult clients and their families in secondary and rehabilitative care settings. *Six clinical hours per week.* PREREQUISITES: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITES: NURS *3117, 3118. (S/U).

3127. Psychiatric Mental Health Nursing. (2). (3040). Theory and principles of nursing practice with clients experiencing psychosocial problems of adaptation. *Two lecture hours per week.* PREREQUISITES: NURS 2117, 2118, 2119, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3129.

3129. Psychiatric Mental Health Nursing Practicum. (3). (3040 lab). Use of nursing process for clinical application of theories and principles of psychiatric mental health nursing to acutely ill clients. *Nine clinical laboratory hours per week in health care setting.* PREREQUISITES: NURS 2117, 2118, 2119, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3127. (S/U).

3217. Nursing Care of the Expanding Family. (2). (3030). Theory and principles of nursing practice with childbearing individuals and families to assist perinatal clients and families with problems of adaptation. *Two lecture hours per week.* PREREQUISITES: NURS 2117, 2118, 2119, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3219.

3219. Nursing Care of Expanding Family Practicum. (3). (3030 lab). Use of nursing process for clinical application of theories and principles of nursing and family theory to childbearing families. Focus on health promotion, prevention and adaptation. *Nine clinical laboratory hours per week in health care setting.* PREREQUISITES: NURS 2117, 2118, 2119, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3217. (S/U).

3227. Child Health Nursing. (2). (3020). Theory and principles of nursing practice with children experiencing health problems requiring short-term and/or long-term intervention. Expansion of nursing role to include health maintenance and restoration of health. *Two lecture hours per week.* PREREQUISITES: NURS *3117, 3118, 3119. COREQUISITE: *NURS 3229.

3229. Child Health Nursing Practicum. (3). (3020 lab). Use of nursing process for clinical application of theories and principles of nursing of children and their families. Focus on health promotion, prevention, and adaptation. *Nine clinical laboratory hours per week in health care setting.* PREREQUISITES: NURS *3117, 3118, 3119. COREQUISITE: *NURS 3227. (S/U).

3317. Perioperative Nursing (1). Theoretical foundation for perioperative practice during the intraoperative phase. PREREQUISITES: NURS *3117, 3118, 3119. COREQUISITE: NURS 3319.

3319. Perioperative Nursing Practicum (2). Application of perioperative nursing process with clinical practice in both the scrub/circulating nursing roles. *Six clinical laboratory hours per week.* PREREQUISITE: NURS *3117, 3118, 3119. COREQUISITE: NURS 3317.

3400. Clinical Pathophysiology. (3). Overview of specific interruptions in normal function of selected human physiological systems, including disease processes, their manifestations, and therapeutic principles underlying treatment. *Three lecture hours per week.* PREREQUISITES: BIOL 1751/1752, 1761/1762, 1451/1452, CHEM 1101/1102.

4110. Nursing Research. (3). Overview of nursing research. Components of research studied. Focus on critiques of existing studies. Emphasis on interpretation and application of research findings. PREREQUISITES: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. For RN students: admission to the Loewenberg School of Nursing; EDPR 4541 or PSYC 3110 or SQCI 3311. **[W]**

4117. Advanced Adult Health Nursing. (2). (4010). Application of nursing process with adult clients, families, and groups experiencing complex problems of adaptation. Role of nurse expanded to include health maintenance, restoration, and rehabilitation of clients experiencing problems of adaptation requiring higher acuity levels of care. *Two lecture hours per week.* PREREQUISITES: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4119

4119. Advanced Adult Health Nursing Practicum. (3). (4010 lab). Clinical experiences include direct care to adult clients families, and groups in high acuity care settings. *Nine laboratory hours per week.* PREREQUISITES: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4117. (S/U).

4120. Contemporary Issues and Trends in Nursing and Health Care. (2). Emphasis on factors which influence nursing and health care. Promotes integration and synthesis of knowledge from previous nursing and general education courses to explore societal and political components that affect delivery of health care. *Three lecture hours per week.* PREREQUISITES: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. For RN students: admission to the Loewenberg School of Nursing

4127. Community Health Nursing. (3). (4020). Overview of community based health care delivery system at local, state, and national levels. Focuses on theories and principles of nursing care of communities and aggregates in public health and home health care settings. Expands nursing role to coordinator of care. *Three lecture hours per week.* PREREQUISITES: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4129.

4129. Community Health Nursing Practicum. (2-3). (4020). Use of nursing and public health theories and principles to provide nursing care to families and communities. *Nine laboratory hours per week.* PREREQUISITES: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. CQREQUISITE: *NURS 4127 (S/U).

4227. Nursing Leadership and Management. (3). (4100). Theories of leadership, management, and change basic to functioning within economic, social and political realities of health care settings/systems. Organizational assessment, decision making, collaboration, coordination, and evaluation emphasized. PREREQUISITES: NURS 4117, 4119. COREQUISITE: *NURS 4229

4229. Nursing Leadership and Management Practicum. (4). (4030). Precepted experience using nursing leadership management theories and principles to coordinate nursing care of groups of patients. *Fifteen laboratory hours per week in hospital setting.* PREREQUISITES: NURS 4117, 4119. COREQUISITE: *NURS 4227. (S/U). **[I]**

4327. Nursing Leadership and Management for RNs. (4). (4100). Theories of leadership, management, and change basic to functioning within existing systems. Applications of conceptual models of nursing to contemporary practice. PREREQUISITE: Restricted to senior RN students. COREQUISITE: NURS 4329.

4329. Nursing Leadership and Management Practicum for RNs. (3). Precepted experience in selected roles using appropriate theories and models to guide practice. *Nine laboratory hours per week in clinical setting.* PREREQUISITE: Restricted to RN students. COREQUISITE: NURS 4327.

4335. Ethical Dialogs. (3). Bioethical principles used to analyze ethical health care problems of the individuals, providers of care and coordinators of care. Allocation of scarce health resources examined in contexts of delivery of care, institutional management and policy development. PREREQUISITE: all provider courses or permission of faculty.

4300-09. Special Topics in Nursing. (3). Topics are varied and announced in the *Schedule of Classes.*

4800. Independent Study. (1-3). Directed study and/or research in selected areas of nursing. *May be repeated for maximum of 7 semester hours of credit.* PREREQUISITE: senior standing and permission of faculty.

The University College

H. RAMSEY FOWLER, A.B., A.M.T., Ph.D., *Dean*
Room G-1, Johnson Hall
http://www.people.memphis.edu/~univcoll/

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
*	Individual Studies	**	Bachelor of Liberal Studies (B.L.S.) Bachelor of Professional Studies (B.P.S.)

* The college is not composed of departments. Its programs are interdisciplinary and may make use of all departments in the university.

** The student and an advisory committee design contract degrees. Group guidelines are available for the following concentrations: African American Studies, Women's Studies, Alcohol and Drug Abuse Services, Human Services, Health Services Administration, Services for the Aging, Orthotics/Prosthetics and Related Fields, Commercial Aviation, Biomedical Illustration, Aviation Administration, Fire Administration/Fire Prevention Technology, Landscape Design and Horticultural Studies, Nonprofit Development and Administration, Paralegal Services, Pre-School and Childcare Administration, Organizational Leadership.

Individual program requirements described in the *Undergraduate Issue of the 1997-1999 Bulletin of The University of Memphis* are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this bulletin; or consult the undergraduate bulletin website at: http://www.memphis.edu for the latest catalog updates.

PURPOSE

University College serves special academic needs of adult and other nontraditional students at The University of Memphis. It does this by offering students a wide variety of individualized degree opportunities, by its administration of interdisciplinary degree programs, and by its oversight of tele-instruction. For faculty across the university, the University College provides the structure to explore and develop interdisciplinary ventures that may later be subsumed into other degree-granting units, in addition to encouraging the development of interdisciplinary courses and promoting the uses of such alternative instructional methods as team teaching and directed study. Finally, University College seeks to create and maintain a spirit of academic community through careful and concerned advising and interaction outside the classroom among students, faculty, staff, and community professionals. With broad responsibility for nontraditional, interdisciplinary and credit continuing education, University College is The University of Memphis's college of lifelong learning.

ORGANIZATION OF THE COLLEGE

The University College offers interdisciplinary courses and interdisciplinary and individualized degree opportunities. In addition, it administers units that enhance higher education access for adults and provide them with support services.

The college is administered by a dean, the dean's staff, and the University College Faculty Council, which is made up of faculty from the other degree granting colleges.

BACCALAUREATE PROGRAMS: Through Baccalaureate Programs, students are offered the opportunity to work on the development and completion of individualized and interdisciplinary programs leading to the Bachelor of Liberal Studies or the Bachelor of Professional Studies degree. Such programs range from Biomedical Illustration to Services for the Aging and from Commercial Aviation to Medieval Tradition in the Culture of the American South. In some areas group contract guidelines exist to assist students in the development of their programs.

INTERDISCIPLINARY MINORS: Students majoring in any department in the university may enhance their academic program through an interdisciplinary minor. Minors in African-American Studies, American Studies, Judaic Studies, Religion in Society, and Women's Studies are offered.

BORNBLUM JUDAIC STUDIES: Bornblum Judaic Studies presents the rich intellectual and cultural traditions of the Jewish people within the context of world cultures. An individualized major and a minor in Judaic Studies are available.

PARALEGAL STUDIES: The Bachelor of Professional Studies in Paralegal Services is offered to individuals pursuing career opportunities in a law office, government agency, or other organization.

ADMISSION

Students are admitted to The University of Memphis through the Office of Admissions and Records. Application forms may be obtained from that office and also from Extended Programs centers. After admission to the university, if students choose to pursue an interdisciplinary or individualized B.L.S. or B.P.S. degree, they must submit a separate application for admission to University College.

Inquiries from persons considering a degree through University College are welcome; persons who believe that their interests will be best served by a baccalaureate program emphasizing personally designed education through contract degrees should attend an inquiry session. Information about dates and times for these sessions, which are held several times a month, may be obtained by calling the University College office. When the University College application is submitted, a $40.00 fee must be paid. This fee includes a $15.00 non-refundable screening fee plus a $25.00 contract/advising fee, refundable if the application is not accepted. Applications are reviewed by University College staff and, if appropriate, by selected faculty. After acceptance, students are advised in the development of their programs and instructed in a final special project by a faculty chairperson or a contract/advising committee chaired by a faculty member. A non-refundable $25.00 contract/advising fee must be paid when students are accepted.

Students may apply more than the ordinary limit of transfer credit for extension, correspondence or armed services courses, provided the courses are an integral part of the coordinated study.

BACCALAUREATE PROGRAMS

The Contract Degree

Students enrolling in the University College pursue either of two degrees: the Bachelor of Liberal Studies (B.L.S.) or the Bachelor of Professional Studies (B.P.S.). Both of these degrees must be awarded for programs that are systematic, interdisciplinary, and individualized. Students

and advisors will use learning contracts to design individual studies.

All contracts will be reviewed and approved by the administration of the University College. A Contract/Advising Committee will assist the student in the development and execution of a degree program that serves the student's needs and meets the academic requirements of the University College and of The University of Memphis. The chairperson and one other committee member must be regular or adjunct members of The University of Memphis Faculty. A third committee member is optional; this person may be a faculty member, an appropriate student, or an off-campus resource person. The committee may direct the student in the preparation of a portfolio to obtain credit for knowledge gained through experience or nontraditional instruction; see *Expenses and Aid* for a description of credit evaluation fees. The Baccalaureate Contract will include work in these major areas: General Education, Coordinated Study, Thematic Studies, Special Project, and Electives.

General Education

The general education program is that part of the undergraduate curriculum that promotes a common background for all baccalaureate candidates. The purpose of the general education program is threefold: to help students develop the skills necessary for completing a college career and assuming an active role in contemporary society, to give students an awareness of the diversity of human endeavors in intellectual, creative, social, and technological spheres, and to help students develop analytical and critical faculties that can be applied across the issues confronting them in the modern world. Above all, the general education program should make available to the student the tools and awareness necessary for active, lifelong learning and for active, literate participation in society.

Thematic Studies

Thematic Studies cross departmental and disciplinary lines to examine a theme, problem, issue, or epoch from several points of view. As upper-division courses, they are designed to provide ways for undergraduates to integrate the full scope of their studies more effectively than they are able to do within the traditional departmental structure. Thematic Studies do, however, require the special knowledge and expertise learned from and fostered by the traditional disciplines. All students will complete a minimum of six semester hours of thematic studies courses.

Coordinated Study

The Individualized Study component of the program includes a Coordinated Study Program of at least 30 to 36 upper-division hours in at least two academic disciplines followed by the Special Project described below. Credit may be earned through courses offered by departments in the other degree-granting colleges, credit by examination, credit for experiential learning, transfer credit, internships or apprenticeships, independent studies, and additional Thematic Studies courses. Students may apply more than the ordinary limit of transfer credit for extension, correspondence, or armed services courses, provided the courses are an integral part of the Coordinated Study. *For a University College student, the Coordinated Study Program corresponds to a departmental major.* Students must earn a C or above in each graded course. All Coordinated Study programs must include a minimum of nine graded upper division hours taken at The University of Memphis. These hours must be earned in courses from two or more departments. A maximum of 33 hours for portfolio-based credit for experiential learning may be applied toward a degree. This learning must be related to the Coordinated Study.

The Special Project

The Special Project will be designed as a synthesizing activity, interdisciplinary in nature, by which the student demonstrates in a sustained manner comprehension and command of the complex skills and understanding encompassed by the Coordinated Study program. A faculty advisor/ chairperson supervises the student's work on the project. The Special Project carries 3 or 6 semester hours credit and is preceded by the project planning seminar or an equivalent 3 credit course. Students must earn at least a grade of C on their Special Projects. Projects must also receive administrative approval before students are certified for graduation.

Electives

Students are not required to take electives. They may include courses in any subject area as electives in their degree program.

Computer Literacy

This requirement can be satisfied by taking one of the following courses or course combinations or another course of study approved by the dean: COMP 1200; ISDS 2749 (1) and 2755; ACCT 2410; ART 3225; ART 4222; JOUR 2121; JOUR 3900; ICL 3600; CIVL 2107 and CIVL 3101; ELEC 1206 and ELEC 1207; MECH 1307 and MECH 3341; TECH 1010 or 1210 and 3233, NURS 3003.

Evaluation

The following methods are used to evaluate a student's performance: the traditional grading systems, Satisfactory/ Unsatisfactory and Credit/No Credit options supplemented by written narrative evaluations, credit or placement by examination, Advanced Placement examinations for degree credit where these are available, and credit for validated learning from experience or non-traditional instruction. Of the 132 semester hours required for graduation, at least 33 of the last 66 hours must be earned through instruction from The University of Memphis.

Honors

Students in University College may earn Honors distinction by fulfilling requirements for the Interdisciplinary Liberal Arts Honors Program or the Individual Thematic Honors Program. Both of these programs require 18 hours of upper division course work, some of which may count toward the Bachelor of Liberal Studies, Bachelor of Professional Studies, or general education requirements, and some of which may be part of the student's elective hours.

DEGREE REQUIREMENTS

GENERAL EDUCATION SEMESTER HOURS

Basic College Skills [12-15 hrs]

Communication [9 hrs]

ENGL	1101	English Composition	(3)
ENGL	1102	English Composition and Analysis	(3)
COMM	2381	Oral Communication	(3)

Mathematics [3-6 hrs]

MATH	1181-1182	Concepts of Number/ Concepts of Algebra	(6)
MATH	1312	Elementary Calculus	(3)
MATH	1321	Analytic Geometry and Calculus	(4)
MATH	2000	Experiences in Mathematics	(3)

Human Studies [12 hrs]

1. Literary Heritage [3 hrs]

ENGL	2201	Literary Heritage	(3)
ENGL	2202	Literary Heritage African-American Emphasis	(3)

2. Fine Arts Heritage [3 hrs]

ART	1101	Introduction to Art	(3)
COMM	1851	Introduction to Film	(3)
DANC	1151	Introduction to Dance	(3)
MUHL	1101	Music Appreciation	(3)
THEA	1551	Introduction to Theater	(3)

3. Historical/Philosophical Heritage (**pre-1500**) [3 hrs]

CLAS	2481	Mythology	(3)
HIST	1301	Development of World Civilization I	(3)
PHIL	1101	Classical Issues in Philosophy	(3)
POLS	1101	Introduction to Ancient Political Thought	(3)
UNIV	2850	Religions of Abraham: Judaism, Christianity, Islam	(3)
UNIV	3580	Hebrew and Greek Legacy	(3)

4. Historical/Philosophical Heritage (**post-1500**) [3 hrs]

HIST	1302	Development of World Civilization II	(3)
PHIL	1102	Values and the Modern Word	(3)
POLS	1102	Introduction to Modern Political Thought	(3)
UNIV	2860	Historical/Philosophical Perspectives on Cultural Confrontations	(3)
UNIV	3581	Faith, Reason and Imagination	(3)

Social Institutions/Social Science [6 hrs]

This requirement can be fulfilled either by taking one course from group 1 and one course from group 2, or by taking two courses from group 2.

Group 1

ANTH	1100	Human Origins and Variations	(3)
CJUS	1100	Introduction to Criminal Justice	(3)
ECON	2120	Introduction to Microeconomics	(3)
POLS	1100	American Government	(3)
PSYC	1101	General Psychology	(3)
SOCI	1111	Introductory Sociology	(3)

Group 2

ANTH	1200	Cultural Anthropology	(3)
CJUS	2110	Comparative Criminal Justice Systems	(3)
ECON	2110	Introduction to Macroeconomics	(3)
GEOG	1301	Survey of World Regions	(3)
GEOG	1401	Introduction to Cultural Geography	(3)
POLS	2301	Comparative Politics	(3)
POLS	2501	International Politics	(3)
PSYC	2201	Deviance: Its Role in History and Culture	(3)
SOCI	2100	Sociology of International Development	(3)
SOCI/CSED	2101	The Family in Global Perspective	(3)
UNIV	2304	Gender and Society	(3)

Natural Sciences [8 hrs]

Choose one from following sequences:

BIOL	1071/1072-		
	1081/1082	Biology A Human Perspective	(8)
BIOL	1151/1152-		
	1161/1162	General Biology	(8)
CHEM	1101-1102	College Chemistry	(8)
CHEM	1131/1121-		
	1132/1122	Principles of Chemistry	(8)
GEOG	1001/1011-		
	1002/1022	Introduction to Environmental and Earth Science	(8)
GEOL	1101-1103	Physical and Environmental Geology	(8)
PHYS	1001/1010-		
	1002/1020	Intro Physics/Survey Astronomy	(8)
PHYS	2003/2510-		
	2004/2520	Physics for Science & Engineering	(8)
UNIV	1610-1611	Natural Science	(8)

Fitness and Wellness [4 hrs]

HMSE	1100	Concepts of Fitness and Wellness	(2)

In addition, students must take physical activity course(s) from the university General Education approved list. (2)

Writing Intensive Requirement (3 hrs): One **[W]** course from the university General Education approved list.

Computation Intensive Requirement (3 hrs): One **[C]** course from the university General Education approved list.

Integrative Requirement (3 hrs): UNIV 4995, Special Project (3 or 6)

THEMATIC STUDIES [6 hrs]

All students must take six semester hours of courses chosen from the following:

UNIV	3500-3599	Thematic Studies	(3-9)
UNIV	4500-4599	Advanced Thematic Studies	(3-9)

COORDINATED STUDY [30-36 hrs]

Students must complete a minimum of 30-36 upper division hours from two or more departments.

SPECIAL PROJECT [3 or 6 hrs] [I]

UNIV	4990	Project Planning Seminar	(3)
UNIV	4995	Special Project **[I]**	(3 or 6)

COMPUTER LITERACY [varies] (-)

ELECTIVES [vary] (-)

Total 132 hrs

ADVISING GUIDELINES

Bachelor of Liberal Studies

BORNBLUM JUDAIC STUDIES

Bornblum Judaic Studies explores the experience of the Jewish people within the contexts of world cultures. Non-theological in its orientation, it provides students the opportunity to study related areas, including the history of the Jewish people, the structures and politics of Jewish communities, the Hebrew and Arabic languages, and the religious, intellectual, and aesthetic traditions of the Jewish people. Courses offered for Bornblum Judaic Studies are open to all students.

A. LOWER DIVISION CORE

Hebrew Language Core (12 hours):

HEBR	1101-1102	Elementary Hebrew	(6)
HEBR	2201-2202	Intermediate Hebrew	(6)

Religious Studies Core (3 hours):

UNIV	2850	Religions of Abraham: Judaism, Christianity, Islam	(3)

B. UPPER DIVISION CORE (6 hours):

UNIV	3801	Jewish Thought	(3)
OR			
UNIV	4801	Jewish Mysticism and Reason **[W]**	(3)
UNIV	3275	History of the Jewish People	(3)

C. JEWISH STUDIES ELECTIVES (12 HOURS):

Choose four from the following:

UNIV	3801	Jewish Thought	(3)
UNIV	4801	Jewish Mysticism and Reason **[W]**	(3)
UNIV	4830	Politics of Israel	(3)
HIST	3271	History of the Mid East	(3)
HIST	4320	Ancient Near East	(3)
ENGL	4661	Bible Literature	(3)

With the permission of the Director of Bornblum Judaic Studies, students may substitute up to two courses for the electives listed above. Such courses will have substantial Judaic Studies content.

D. JUDAIC STUDIES CHAIR OF EXCELLENCE COURSES (9 HOURS):

Choose three: Each year, the Bornblum Judaic Studies hosts a major scholar in the field of Jewish Studies. All Judaic Studies students will take at least three courses offered by these scholars. Courses will be offered in cooperating departments such as English, History, Philosophy, Art, Sociology, and Political Science.

E. THEMATIC STUDIES (6 Hours)

UNIV	3580	Hebrew and Greek Legacy	(3)
UNIV	3581	Faith, Reason, Imagination	(3)

F. SPECIAL PROJECT (3 or 6 hours)

UNIV	4990	Project Planning Seminar	(3)
UNIV	4995	Special Project **[I]**	(3 or 6)

G. GENERAL ELECTIVES:

Recommended:

ART	4121	Ancient Art of the Near East	(3)
PHIL	4711	Philosophy of Religion	(3)
POLS	3102	Religion and Politics	(3)
SOCI	3860	Sociology of Religion	(3)

AFRICAN AMERICAN STUDIES

African American Studies re-examines history, society and the arts from a different perspective, giving recognition to the achievements of African Americans and directing scholarship toward the totality of the African American experience. In addition, it offers all students an intellectual framework for discerning and dealing with racism; informs and awakens all students to the cultural heritage of African Americans to promote improved self-understanding regardless of race; and provides African American students with positive models of leadership, personal development and social commitment.

Advising Clusters

As a service to students interested in African American Studies, the following groups of courses have been identified for students who wish to select a cohesive group of electives to support major programs of study or other academic goals.

Though these are not formal programs of study, students are advised to complete at least three courses in any single group in order to experience depth of knowledge and understanding in a given area.

Race Relations and Interracial Communication: This group of courses has been identified as supportive of the programs of those students who may wish to teach in the schools; work as counselors, therapists or social workers; participate in community and/or social service agencies; undertake business ventures in minority areas or with minority clients; or prepare for careers as attorneys.

COMM	3361	African American Rhetoric
COMM	4373	Interracial Communication
SOCI	3401	Social Inequality
SOCI	3420	Sociology of the South
SOCI	3422	Racial and Ethnic Minorities: A Socio-Historical Approach
SOCI	4420	Racial Inequality

Backgrounds and Historical Development: Students completing this group may wish to pursue anthropological and/or historical study; examine relationships between art forms and cultural development; understand their own history in relation to African cultures; gain backgrounds to the humanistic study of economic development; or pursue careers in such areas as international studies.

ANTH	3242	Peoples of Africa
ANTH	3342	Archaeology of Africa
HIST	4881	Black American History
SOCI	4460	Black and White Women in the South

Cultural Forms and Expressions: This group of courses is designed for students interested in literary, art and/or musical history; those interested in becoming writers, artists, or musicians; and students of cultural history.

ANTH	3342	Archaeology of Africa
COMM	3361	African American Rhetoric
ENGL	4371	African American Literature
MUHL	4801	American Folk and Popular Music

Social and Political Problems: This group of courses is designed for students of modern American history; those wishing to study and/or address contemporary social and political problems; those planning administrative, legal, or political careers; and those working with minorities and majority/minority issues.

HIST	4881	Black American History
POLS	4212	Constitutional Law: Civil Liberties
SOCI	3401	Social Inequality
SOCI	4420	Racial Inequality
SOCI	4460	Black and White Women of the South
POLS	4415	African American Political Thought to 1900
POLS	4416	African American Political Thought from 1900

Women's Studies

Women's Studies at The University of Memphis is an interdisciplinary academic

field encompassing women's history, work, literature, roles, and status in diverse classes, cultures, and societies. Focusing on the study of gender across the curriculum, Women's Studies reexamines and provides a critical context for the basic assumptions and theories on which traditional academic disciplines rest.

Bachelor of Professional Studies

Alcohol and Drug Abuse Services

Students in Alcohol and Drug Abuse Services will develop contracts in either Social and Public Services or Administrative Services. All will take a core of courses in alcohol and drug abuse, social, and administrative services, and will complete their contracts by taking courses relevant to their concentrations. All students must have on-the-job experience, evaluated through internships or portfolio assessment, or both.

Aviation Administration

Students in Aviation Administration study in one of these three areas: General Administration and Management, Computer Systems, or Electronic Systems. In addition, thirty-four semester hours of academic credit are available for completion of three categories of FAA journeyman level instruction: Airport Traffic Control Tower, Air Route Control Center, and Flight Service Station. Credit by individual course is granted for Airways Facilities Journeyman and for instruction in all four categories beyond the journeyman level.

Biomedical Illustration

Students in Biomedical Illustration will take a common core of courses in art, photography, chemistry, and the life sciences. In addition to courses in biomedical illustration and biomedical photography, students will take appropriate courses in cinema, video, computer applications, and graphics. Students in Biomedical Illustration will complete internships in at least one setting in the Memphis area.

Commercial Aviation

Students in Commercial Aviation will study General Administration or develop contracts in areas of interest such as aviation and climatology and technological or computer systems. A student must hold private pilot license or other FFA ratings to be considered for admission. Academic credit is awarded for FAA ratings for Commercial Pilot, Instrument Rating, Multi-Engine Rating, and other ratings. Students are required to earn a minimum number of FAA ratings.

Fire Administration and Fire Prevention Technology

University College is the regional center for the Open Learning Fire Service Program (OLFSP), serving fire service personnel in Alabama, Arkansas, Kentucky, Louisiana, Mississippi, South Carolina, and Tennessee. OLFSP is a degree completion program, offering upper division courses in Fire Administration and Fire Prevention Technology. These courses are designed for independent study. Freshman and sophomore courses, electives, and other courses related to the fire service are taken at a college near the student's residence.

CORE COURSES

POLS	3613	Advanced Fire Administration
TECH	3940	Analytic Approaches to Public Fire Protection **[C]**
POLS	3612	Fire Prevention Organization and Management
POLS	3614	Political and Legal Foundations of Fire Protection **[W]**
TECH	3944	Fire Protection Structure and Systems Design
TECH	3947	Applications of Fire Research
TECH	3948	Managerial Issues in Hazardous Materials

FIRE ADMINISTRATION CONCENTRATION

POLS	3610	Personnel Management for the Fire Service
POLS	3611	Disaster and Fire Defense Planning
POLS	3615	The Community and the Fire Threat

FIRE PREVENTION TECHNOLOGY CONCENTRATION

TECH	3942	Fire Related Human Factors
TECH	3945	Incendiary Fire Analysis and Investigation
TECH	3946	Fire Dynamics

Health Services Administration

Students following guidelines for Health Services Administration will be experienced health care professionals who have completed non-baccalaureate programs in health care specialties such as medical laboratory technology, respiratory therapy, radiological technology, and nursing, and who want to become administrators in health care settings. They will build upon their training and experience by taking courses in such areas as business practice, administration, interpersonal skills, policy, risk management, social context of health care, and financial management. Transfer credits for their health care specialty will be considered a part of their Coordinated Study.

Human Services

Students in Human Services are expected to develop a philosophical orientation to the human condition; to enlarge their understanding of social structures, values and norms; to study human growth and development; and to become informed about social change and social and bureaucratic organization. Students in Human Services will take courses from such departments as Counseling and Personnel Services, Sociology and Social Work, Psychology, Management, and Special Education.

Landscape Design and Horticultural Studies

These guidelines include study in science, applied science, graphics, design, communication, and business administration. They also allow students to choose a special emphasis in either construction design or ornamental horticulture. The guidelines serve persons with experience in these areas, as well as beginning students who wish to enroll at State Technical at Memphis or the University of Memphis. The two institutions collaborate in offering this degree program; some courses may be taken at either institution, while other courses are offered only by the State Technical Institute at Memphis or only by the University of Memphis.

Nonprofit Development and Administration

The goal of these guidelines is to help persons understand the role of nonprofits in society and to prepare them to organize, develop, and administer nonprofit organizations. Nonprofit organizations include educational, scientific, relilgious, and other charitable organizations, as well as private foundations, community-based organizations, professional and fraternal associations, and civic and social organizations. The guidelines are designed to serve persons who have worked, or who want to work, within the nonprofit sector as employees, or have served in the community as volunteers. Graduates will likely enter careers such as communications director, volunteer director, or program director for a nonprofit agency.

Objectives of the program include the study of (1) the historical and cultural context of nonprofit organizations, specifically their place within a market economy; (2) the characteristics of persons and communities served by nonprofit organizations; (3) legal, ethical, and policy issues which shape the governance, development, and operation of nonprofits; (4) relevant skills, including management of personnel, information, and finances, interpersonal communication, program evaluation, and marketing; (5) special topics, including fundraising, philanthropy and voluntarism.

Organizational Leadership

Organizational Leadership is designed to (1) promote understanding of the nature of bureaucratic organizations and the fundamentals of administrative leadership; (2) allow students to reflect upon national and international organizational contexts and upon significant social and cultural issues raised in those contexts; and (3) promote skills in formal and interpersonal communication, including sensitivity to personal issues having an impact upon the quality of accomplishment in the work place. *In addition to meeting all entrance requirements for The University of Memphis, applicants must provide documentation of a minimum of five years of organizational leadership experience and present a transcript showing at least 45 semester hours of earned academic credit or an earned associate's degree.*

Orthotics/Prosthetics and Related Fields

Entering students normally will have completed an Associate of Applied Science Degree in Orthotics and/or Prosthetics before being admitted to this baccalaureate program. Once in it, however, students will concentrate in one of these areas: Patient Rehabilitation, Business Management, or Engineering Technology.

Pre-School and Childcare Administration

These guidelines are designed for persons seeking careers in the administration of early childhood programs including childcare centers, both for-profit and nonprofit; private and public prekindergarten programs; Head Start; pre-schools; parents' day out programs; before and after school care; and centers for children with special needs. Also served by these guidelines are persons with experience in childcare settings from a wide variety of backgrounds, including childcare volunteers and aides, as well as teachers and directors. In addition to core content in early childhood professional knowledge, there is course work to develop skills in fiscal management, recruiting and hiring personnel, health and safety management, board relations, marketing and public relations, and liaison with professional associations and regulatory agencies.

Note: This program does not lead to Tennessee state licensure for school administration.

Services for the Aging

Students in Services for the Aging will take a core of courses in gerontology, adult development, and social policy for the aging. In addition, they will enroll in courses appropriate for those seeking employment as counselors, managers, teachers, activity directors, family life workers, personnel supervisors, and the like.

Women's Studies

Focusing on the study of gender across the curriculum, Women's Studies reexamines and provides a critical context for various professional fields. (See "Women's Studies" under "Bachelor of Liberal Studies.")

PARALEGAL STUDIES

Paralegal Studies courses are designed for students seeking professional knowledge and skills necessary to perform substantive legal work under the direction and supervision of an attorney. Only licensed attorneys are permitted to practice law; however, qualified paralegals working under attorney supervision can contribute significantly to the efficient delivery of legal services in an expanding variety of private law office, corporate, and government agency settings.

Paralegal Studies offers the B.P.S. degree in Paralegal Services. The paralegal professional core courses emphasize (1) theoretical and practical applications of legal and ethical principles; (2) collection, organization, and critical analysis of legal materials; (3) effective communications and computer skills; (4) initiative, flexibility, and cooperation in the workplace; and (5) preparation to meet the challenges of a still-evolving profession while avoiding the unauthorized practice of law by lay persons.

The Paralegal Studies Program has been approved by the American Bar Association.

Paralegal Services Advising Guidelines

Students selecting the B.P.S. degree in Paralegal Services complete all University College degree and graduation requirements including the Coordinated Study degree component according to the following guidelines (67 hours):

A. PARALEGAL PROFESSIONAL CORE (36 hours)

(At least 18 hours of these core courses must be completed at The University of Memphis with a minimum grade of C in each course.)

Paralegal Requirements (27 hours):

UNIV	2400	Professional Responsibility	(3)
UNIV	2410	Introduction to Law	(3)
UNIV	2420	Legal Research and Writing I	(3)
UNIV	3410	Contracts and Commercial Law	(3)
UNIV	3420	Torts	(3)
UNIV	3430	Business Associations	(3)
UNIV	3440	Civil Procedure	(3)
UNIV	3450	Legal Research and Writing II	(3)
UNIV	4410	Paralegal Internship	(3)

Paralegal/Law Related Electives (9 hours):

Select three courses. It is recommended that additional electives be selected from this group.

CJUS	3510	Law and Society	(3)
CJUS	3521	Constitutional Criminal Procedure	(3)
CJUS	4530	Principles of Evidence and Proof	(3)
FIR	3310	Real Estate Principles	(3)
FIR	4011	Estate Planning and Taxation	(3)
POLS	3211	State and Local Governments	(3)
POLS	4217	The Legislative Process	(3)
UNIV	3481	Family Law	(3)
UNIV	3482	Labor Law	(3)
UNIV	3483	Computers in the Law	(3)
UNIV	3484	Bankruptcy Practices	(3)
UNIV	3485	Real Estate Practices	(3)
UNIV	4450	Legal Research and Writing III	(3)

B. BUSINESS REQUIREMENTS (7 hours):

ACCT	2010	Fundamentals of Accounting I	(3)
ISDS	2749	Introduction to Business Microcomputer Applications	(1)
ISDS	2755	Introduction to Management Information Systems	(3)

C. COMMUNICATIONS REQUIREMENTS (6 HOURS): (one course from each group with a minimum grade of C in each course)

Written Communications [W]: ENGL 3601, 3604, 4602; MGMT 3510.

Interpersonal Communications: COMM 3341, 4341; COUN 4621, 4781.

D. INTERDISCIPLINARY REQUIREMENTS (18 hours): (At least one course from each group with a minimum grade of C in each course)

Business and Administrative Applications: ECON 4040, 4130; FIR 3011, 3130, 4011, 4310; MGMT 3215, 4230; POLS 3601, 4221.

Philosophical and Constitutional Perspectives: CJUS 4531; HIST 3840; PHIL 4551; POLS 4211, 4212, 4405.

Law in Society: CJUS 3426, 3510, 3521, 4170, 4520; POLS 4224, 4504; SOCI 3401, 3420.

Ethical/Moral/Social Issues: CJUS 3152, 4130; PHIL 3411, 3511, 3514; SOCI 4420, 4442, 4631; POLS 3402.

Research and Statistical Applications [C]: CJUS 3129; EDPR 4541; POLS 4101; SOCI 3311.

MINORS

African-American Studies

The Minor: 18 semester hours with courses chosen as follows:

Group 1 (six semester hours)
Choose **two** of the following:

COMM	3361	African American Rhetoric	(3)
COMM	4373	Interracial Communication	(3)
SOCI	4420	Racial Inequality	(3)

Group 2 (three semester hours)
Choose **one** of the following:

ANTH	3242	Peoples of Africa	(3)
ANTH	3342	Archaeology of Africa	(3)

Group 3 (three semester hours)
Choose **one** of the following

SOCI	3401	Social Inequality	(3)
SOCI	3420	Sociology of the South	(3)
SOCI	3422	Racial and Ethnic Minorities: A Socio-Historical Approach	(3)
SOCI	4460	Black and White Women In the South	(3)
POLS	4415	African American Political Thought to 1900	(3)
POLS	4416	African American Political Thought from 1900	(3)

Group 4 (six semester hours)
Choose **two** of the following:

ENGL	4371	African American Literature	(3)
HIST	4881	Black American History	(3)
HIST	4882	Civil Rights Movement In the United States Since 1930	(3)
MUHL	4802	American Folk and Popular Music	(3)
POLS	4212	Constitutional Law: Civil Liberties	(3)

With the signed approval of the Dean of the University College, students may substitute up to two courses for those listed above. Substituted courses will have substantial African American Studies content, and students will be allowed to do papers, projects, or other independent work on African American Studies issues.

American Studies

The American Studies minor engages students in an examination of the culture and society of the United States, with attention paid to the ways in which Americans express their basic values and give meaning to their institutions and everyday social practices. These values, institutions, and practices are a reflection, in part, of the different experiences of a people, according to their race, gender, class, and historical roots. This minor provides an opportunity to explore the commonalities and differences among Americans through an interdisciplinary course of study.

The Minor: 18 semester hours of required courses and electives.

A. REQUIRED CORE COURSES (6 HOURS)

UNIV	3531	American Experience: Images and Narrative	(3)
UNIV	3541	American Experience: Language and Objects	(3)

B. ELECTIVE COURSES (12 HOURS)

Select one course from each of the following groups, plus two additional courses from these groups. No more than two courses from any single department can be accepted.

Group I

COMM	4381	Rhetoric and Public Controversy	(3)
COMM	4851	Film History II (1940-1960)	(3)
COMM	4856	Women and Film	(3)
ENGL	3321	American Literature Before 1860	(3)
ENGL	3322	American Literature 1860 to WWI	(3)
ENGL	3323	American Literature WWI to Present	(3)
ENGL	3521	The American Language	(3)
ENGL	4371	African American Literature	(3)
MUHL	4801	American Folk and Popular Music	(3)

MUHL	4804	Blues	(3)
MUHL	4805	History of Rock and Roll	(3)
MUHL	4806	History of Jazz	(3)
MUHL	4807	Memphis Music	(3)

Group 2

ANTH	3035	Indians of the Mid-South	(3)
ANTH	3282	Cultural History of American Communities	(3)
GEOG	3401	Historical Geography of United States	(3)
GEOG	4316	Geography of the South	(3)
HIST	3035	Technology and Culture in American History	(3)
HIST	3863	Social and Intellectual History of U.S.	(3)
HIST	4701	The United States: 1914 to WWII	(3)
HIST	4851	History of Women in America	(3)
HIST	4941	History of the American Indian	(3)
SOCI	3420	Sociology of the South	(3)
SOCI	4420	Racial Inequality	(3)

C. With the signed permission of the Dean of the University College or the Dean's designate, the following are acceptable: (1) A course from Group 1 of Section B can be substituted for one of the courses in Section A. (2) Up to two courses may be substituted for those listed in Section B. In content and approach, these courses will have a distinct American Studies emphasis.

Judaic Studies

The minor in Judaic Studies is open to students majoring in any department in the university, in addition to special students who wish to enroll in order to take this program.

The Minor: 18 semester hours of required courses and electives.

A. REQUIRED LANGUAGE [6 HOURS]

HEBR	1101	Elementary Hebrew	(3)
HEBR	1102	Elementary Hebrew	(3)
HEBR	2201	Intermediate Hebrew	(3)
HEBR	2202	Intermediate Hebrew	(3)

B. ELECTIVE COURSES [12 HOURS]

1. Select two or three from the following:

UNIV	2850	Religions of Abraham: Judaism, Christianity, Islam	(3)
UNIV	4801	Jewish Mysticism and Reason	(3)
HIST	3275	History of the Jewish People	(3)
UNIV	3801	Jewish Thought	(3)

2. Select at least one from the following:

ART	4121	Ancient Art of the Near East	(3)
ENGL	4461	The Bible as Literature	(3)
HIST	3271	The Middle East	(3)
UNIV	4830	The Politics of Israel	(3)

C. With the signed approval of the Director of Bornblum Judaic Studies, students may substitute one course not listed under B.2. In a given semester, a substituted course will be taught with substantial Judaic content, and students will be permitted to do papers, projects, or other independent work on Judaic subjects.

Religion In Society

The University College offers an interdisciplinary minor in Religion in Society. This minor examines the role of religion in society as seen from the perspectives of culture and social organization; of history and philosophy; of art and music. The minor is open to students majoring in any area in any of the undergraduate colleges or to special students who wish to enroll in order to take such a program.

The Minor: 18 semester hours of core courses and electives.

A. Required Core Courses

PHIL	3701	The Human and the Divine
ANTH	4253	Anthropology of Religion
SOCI	3860	Sociology of Religion

B. Additional Courses (select one course each from any three of the following four groups of courses):

Group 1

ANTH	3351	Archaeology of Europe and Asia
POLS	3102	Religion and Politics
UNIV	4830	The Politics of Israel

Group 2

PHIL	3411	Contemporary Moral Problems
PHIL	3511	Ethics
PHIL	3721	Oriental Philosophy
PHIL	4711	Philosophy of Religion
UNIV	3801	Jewish Thought
UNIV	4801	Jewish Mysticism and Reason

Group 3

HIST	3275	History of Jewish People
HIST	3290	Traditional Asia
HIST	4361	History of the Byzantine Empire
HIST	4371	Early Middle Ages
HIST	4372	High Middle Ages
HIST	4390	Europe — Age of Reformation

Group 4

ART	4121	Ancient Art of the Near East
ART	4142	Northern Renaissance Art
ART	4146	Baroque Art
ART	4181	Traditional Arts of Africa, Oceania, and North America
ART	4131	Early Christian and Byzantine Art
ART	4134	Romanesque and Gothic Art
MUSA	4104	Sacred Music in History & Practice I
MUSA	4105	Sacred Music in History & Practice II
MUSA	4801	Studies in Sacred Music
ENGL	4461	Bible as Literature

Women's Studies

The Minor: 18 semester hours, including 6 hours from core courses and 12 hours of electives.

A. Core Courses (Choose 2)

UNIV	2304	Gender and Society
UNIV	4304	Studies in Feminism
HIST	4851	History of Women in America

B. Electives (Choose 4)

ANTH	3511	Culture, Kin, and Family
ANTH	4551	Culture and Childbirth
COMM	4856	Women and Film
ENGL	4451	Studies in Women and Literature
HIST	4831	History of American Family
SOCI	3432	Sociology of Gender
SOCI	4420	Racial Inequality
SOCI	4460	Black and White Women in the South

With the signed permission of a Women's Studies advisor, students may substitute up to two courses that focus on Women's Studies issues for those listed under B, above. Substituted courses will be taught with substantial Women's Studies content, and students will be permitted to do papers, projects, or other independent work on Women's Studies issues.

PRE-THEOLOGY/RELIGIOUS STUDIES ADVISORY COMMITTEE: This committee recommends appropriate academic policies and procedure for advising students with career aspirations in the theological area or in the graduate academic study of religion or religious issues. The committee serves to inform students of different requirements such as languages and natural and social sciences. Dr. Stephen D. Benin, Judaic Studies, is chair and advisor.

University College Course Descriptions

(UNIV)

1610. Natural Science I. (4). Development of universe; origin of elements and species; development of natural laws and their influence on cultural development of humankind. Potentials and limitations of science explored. *Three lecture, two laboratory hours per week.* **[G].**

1611. Natural Science II. (4). Concept of origin of universe and development of scientific thought; ways in which scientists develop knowledge of distant past; degrees of certainty possible to scientific investigation. Possible conflicts between scientific thinking and human institutions explored. *Three lecture, two laboratory hours per week.* PREREQUISITE: UNIV 1610. **[G].**

THEMATIC STUDIES (UNIV)

3500-3599. Thematic Studies. (3-9). Interdisciplinary seminars about significant problems, themes, or ideas. Specific course descriptions each semester in "Addenda" section of *Schedule of Classes.*

3509. Connections. (6). [W].

3527. Making the Humane City. (6). [W].

3531. American Experience: Images and Narrative. (3). Organized around "images" and "narratives". Utilizes a variety of cultural materials to enhance appreciation of the peoples and experiences that define the term "American".

3541. American Experience: Language and Objects. (3). Organized around "language" and "objects". Utilizes a variety of cultural materials to enhance appreciation of American language and American perceptions of objects.

3580. Hebrew and Greek Legacy. (3). Interdisciplinary examination of salient ideas, values, and traditions of ancient Hebraic and Greek cultures, with emphasis on those ideas and values that have most significantly influenced the modern world. Understanding of ideas and values enhanced through comparison with selected non-Western traditions. **[G].**

3581. Faith, Reason, and Imagination. (3). Interdisciplinary examination of religious, rationalist, and aesthetic viewpoints as distinctive ways of understanding what is fundamental to human experience. Exploration of historical development of each of these modes of understanding and examination of tensions that exist among them in modern world. **[G].**

4500-4599. Advanced Thematic Studies. (3-9). Advanced interdisciplinary seminars about significant problems, themes, or ideas. Specific course descriptions each semester in "Addenda" section of *Schedule of Classes.*

4529. Character and Society in Contemporary America. (6). (3529). [W, I].

INDIVIDUALIZED STUDIES (UNIV)

1005. Directed Study. (1-3). Directed study at introductory level. Student may seek permission to study under faculty direction in an area not routinely taught. *This course may be repeated for maximum credit of 6 hours.* PREREQUISITE: approval of Qut-of-Class Learning and Baccalaureate Contracts.

2110. Field Experience. (1-6). Supervised on-site training in basic skills. *May be repeated up to a maximum of 6 hours.* PREREQUISITE: Approval of Out-of-Class Learning and Baccalaureate Contracts. (S/U).

2304. Gender and Society. (3). Sources, development, and effect of gender hierarchy on self-concept, quality of life, and ability to effect social change; subordination of women of different classes, races, and ethnicities across nationalities, cultures, and centuries; symbol, myth, and psychology in human development and gender divisions of power within historical struggle for control of world's wealth. **[G].**

2400. Professional Responsibility. (3). Introduction to paralegal profession; organization of legal institutions; role of attorneys and paralegals in legal system; regulation, legal ethics, and professional responsibility.

2410. Introduction to Law. (3). (UNIV, ADOS, OFAD 2210). Introduction to American substantive and procedural law; origins and applications of legal theories and processes; case law analysis. PREREQUISITE: ENGL 1101.

2420. Legal Research and Writing I. (3). (UNIV, ADOS, OFAD 2213). Research methods using legal encyclopedias, annotations, form books, reporters, codes, regulations, digests, and citators. Style of legal memorandum and uniform citation. PREREQUISITE: ENGL 1101.

2850. Religions of Abraham: Judaism, Christianity, Islam. (3). Survey of development of several Near Eastern religious traditions; consideration of intellectual relationships among them. **[G].**

2860. Historical/Philosophical Perspectives on Cultural Confrontations. (3). Interdisciplinary examination of causes and effects of conflicts between and within cultures. Examines notion of cultural unity, issues of cultural identify, and categories used to construct cultural positions. European, African, Asian, and Native-American cultures studied in order to assess historical and philosophical viewpoints that influence understandings of contemporary society. **[G].**

3200. Aviation Administration. (3). Administrative principles as applied to airport operations, general aviation, government operations and enforcement, airline companies, and manufacturing companies. Emphasis upon Federal Aviation Administration regulations that govern and guide the administrator in these areas.

3300. Medical Illustration Techniques I. (3). Special techniques used by illustrators working in medical settings.

3301. Medical Illustration Techniques II. (3). Further instruction in special techniques used by illustrators working in medical settings. Work with case problems.

3302. Biomedical Photography. (3). Special techniques used by photographers working in medical settings.

3410. Contracts and Commercial Law. (3). (UNIV, ADOS, OFAD 3218). Survey of law affecting the formation, performance, and enforcement of contracts; the Uniform Commercial Code; consumer protection; debtor-creditor relations; and bankruptcy. Emphasis on paralegal's role in contract and commercial cases. PREREQUISITES: UNIV 2400, 2410, 2420.

3420. Torts. (3). Survey of state and federal law treating civil injury to persons or property; common law and statutory torts, worker's compensation, and insurance. Emphasis on paralegal's role in preparing personal injury and compensation cases. PREREQUISITES: UNIV 2400, 2410, 2420.

3430. Business Associations. (3). (UNIV, ADOS, OFAD 2219). Legal aspects of formation and operation of proprietorships, agencies, partnerships, and corporations. Emphasis on paralegal's role in drafting business documents and maintaining corporate records. PREREQUISITES: UNIV 2400, 2410, 2420.

3440. Civil Procedure. (3). (UNIV, ADOS, OFAD 3220). Application of Rules of Civil Procedure to civil litigation in federal and state courts; jurisdiction; pleadings; discovery requests; trial and appellate practices; judgments. Emphasis on paralegal's role in civil litigation. PREREQUISITES: UNIV 2400, 2410, 2420.

3450. Legal Research and Writing. II. (3). (2214). Advanced study of legal research and writing methods; computerized legal research; format and style of trial memorandum and appellate brief. PREREQUISITE: 15 hours in UNIV paralegal courses including UNIV 2420.

3481. Family Law. (3). (UNIV, ADOS, OFAD 2216). Substantive and procedural law affecting the family; marriage; procreation; divorce; child custody and support. Emphasis on Tennessee law and paralegal's role in family cases. PREREQUISITES: UNIV 2400, 2410, 2420.

3482. Labor Law. (3). (UNIV, ADOS, OFAD 3219). Law affecting employment relations; NLRB and EEQC procedures; QSHA and ADA issues in the workplace. Emphasis on paralegal's role in labor law cases. PREREQUISITES: UNIV 2400, 2410, 2420.

3483. Computers in the Law. (3). Detailed examination of practical, technical, and theoretical aspects of computer systems as applied in the modern law office; includes docket control, billing, communications, litigation support, and legal document production. PREREQUISITE: ISDS 2749, 2755.

3484. Bankruptcy Practices. (3). Intensive study of substantive and procedural law of bankruptcy; emphasis on applications and processes used by the paralegal when assisting in bankruptcy cases. PREREQUISITES: UNIV 2400, 2410, 2420.

3485. Real Estate Practices. (3). Substantive law of real property; acquisitions, characteristics, and transfer of interests in real estate; particular emphasis on the role of paralegals assisting real estate attorneys with realty transfers and closings in Shelby County, Tennessee. PREREQUISITES: UNIV 2400, 2410, 2420.

3601. Introduction to Health Services Administration. (3). Structure of the U.S. health care system and issues involved in administration of system. Qverview of system including causes and characteristics of use of health services; individual provider settings; technology and resources needed to provide health care services; health care policy and politics.

3700-3739. Special Topics. (1-6). Examination of selected topics announced in *Schedule of Classes.*

3801. Jewish Thought. (3). Analysis and critical evaluation of major ideas representative of Jewish intellectual traditions. Focus upon theological and philosophical issues. *With different content, may be repeated once.*

4110. Internship. (3-6). Supervised training in work related to student's educational objectives. *May be repeated to maximum of 12 hours.* PREREQUISITE: approval of Qut-of-Class Learning and Baccalaureate Contracts. (S/U)

4304. Studies in Feminism. (3). Analysis and application of feminist theory across disciplines; emphasis upon development of feminist philosophies and impact upon traditional methodologies and fields of study.

4380. Independent Study. (1-3). Directed individual study or research. Students who have identified area of study pertinent to their coordinated study program, that is not routinely taught, may pursue the study under direction of faculty member. *May be repeated to maximum of 6 hours.* PREREQUISITE: approval of Qut-of-Class Learning and Baccalaureate Contracts.

4410. Paralegal Internship. (3). Students engage in supervised work experience in appropriate legal setting. Individual progress conferences arranged and evaluative reports developed. PREREQUISITES: approval of the Paralegal Studies director. (S/U)

4450. Legal Research Writing III. (3). Advanced legal research and writing involving development of offensive and defensive litigation strategies and preparation of state and federal trial court pleadings which utilize these strategies Survey of appellate process and preparation of appellant and appellee briefs.

4700-09. Advanced Special Topics. (3-6). Advanced examination of selected topics announced in *Schedule of Classes.*

4801. Jewish Mysticism and Reason. (3). Survey of Jewish mystical thought, its history, leading personalities, major concepts and seminal texts:

relationship to normative Judaism and Jewish philosophy. **[W].**

4830. The Politics of Israel. (3). Study of the Israeli political process.

4990. Project Planning Seminar. (3). Selected and individualized methodology related to identifying, planning, conducting, analyzing, and reporting reserch related to the culminating special project. PREREQUISITE: Senior Standing and approved baccalaureate contract or interdisciplinary degree guidelines and permission of Associate Dean. (S/U).

4995. Special Project. (3 or 6). Academic research or other creative activity resulting in tangible project to demonstrate synthesis of student's Coordinated Study. PREREQUISITE: Completion of UNIV 4990 or equivalent and approval of a learning contract for the project. Students will receive an in-progress grade or a letter grade. **[I]**

EXPERIENTIAL LEARNING (UNIV)

A portfolio describing and documenting knowledge gained through experience or non-traditional instruction may be prepared by a University College student for assessment by a faculty member. This learning must be related to the Coordinated Study. (See *Expenses and Aid* and *Academic Regulations* sections for more details.) That faculty assessor recommends the descriptive title, level, and amount of credit to be assigned by the dean of University College. *A maximum of 33 hours may be applied to a degree. Credit is posted to the student's transcript as follows.*

1900. Introductory Level Experiential Learning in (descriptive title).

2900. Intermediate Level Experiential Learning in (descriptive title).

3900. Advanced Level Experiential Learning in (descriptive title).

Independent Departments and Programs

There are several independent units which contribute to undergraduate programs. The independent departments or programs included here are University Honors Program, The School of Audiology and Speech-Language Pathology, Interdisciplinary Studies, The University of Memphis Libraries, the Orientation Program, and Remedial and Developmental Studies.

THE NATIONAL STUDENT EXCHANGE: The University of Memphis is a member of the National Student Exchange (NSE). Students at NSE member institutions may spend a semester or up to a full year at other participating institutions, while paying tuition and fees typically comparable to costs of attending The University of Memphis. Students might exchange to experience a different part of the country or to pursue special academic opportunities offered by other member institutions. Over 130 member institutions in nearly every state and Puerto Rico and the Virgin Islands have exchanged over 40,000 students since the program was established in 1968.

Participating students must have a 2.5 grade point average at the time of application for an NSE exchange. Applications are screened by The University of Memphis and will include biographical essays, transcripts, and letters of reference from faculty. Institutions to which students are applying then select incoming exchange students based on how many students they are able to accept and the strength of the students' applications. Ninety-seven percent of students are placed at their first, second, or third choice exchange institutions; 84% are placed at their first choice institution.

For more information and applications see the NSE coordinator in the University Honors Program office.

UNIVERSITY HONORS PROGRAM

DAVID PATTERSON, Ph.D., *Director*
Room 404, Jones Hall

The Honors Program provides exceptional educational opportunities for highly motivated and able students, including special curricular options and the opportunity to earn Honors distinction; an extensive co-curricular program emphasizing out-of-classroom experiences such as field trips, cultural events, or discussions with visiting scholars; and a social environment in which to meet other Honors students. The Honors Program also works individually with students planning for study abroad and other student exchange experiences, in pursuing career oriented or community service oriented internships, and in preparing applications for scholarships and career and graduate study opportunities. The Honors Program works closely with the Undergraduate Research Scholar Program, enabling students to develop research proposals with faculty mentors. Successful proposals and projects provide students invaluable hands-on experience with research in their academic field, including the possibility of presenting a paper based on the project at the National Conference on Undergraduate Research, held each year on a different university campus. The designation of "Undergraduate Research Scholar" is added to the transcripts of those students who (1) present research projects at The University of Memphis Works in Progress Symposium; (2) are invited to the National Conference for Undergraduate Research (NCUR); and (3) meet all other requirements for a degree with honors.

Students may earn Honors distinction by meeting requirements for the Honors Certificate, based on completion of 12 hours of Honors course work, plus the *Honors Forum*, usually earned in the freshman and sophomore years; and/or fulfilling requirements for one of several Honors options offered in conjunction with the student's major or Interdisciplinary Liberal Arts Honors program, which is open to students in most majors. Appropriate Honors distinction is indicated on the student's transcript and is recognized at graduation. See *Curriculum and Requirements* below for detailed descriptions of these program options.

The University Honors Program is governed by the Honors Council, a committee composed of the Director of the Honors Program, the Assistant Director of the Honors Program, six faculty members chosen by the Academic Senate, and two honors students elected by the Honors Student Association. The program is housed in Old Brister Library, Room 115, where the office of the director is located. A seminar-conference room and an honors lounge, both open to all students who are active in the Honors Program, are also located there.

Admission and Program Standards

Incoming freshmen who score at least 27 on the ACT, or its equivalent on other tests, are invited to participate. Transfer students or students previously enrolled at The University of Memphis are eligible for the program if they have an overall grade point average of 3.00 for freshmen and sophomores and 3.25 for upper-division students. Those who do not qualify in one of these ways will be considered for provisional acceptance upon direct application or receipt by the director of a recommendation from high school or college faculty. Students whose overall grade point average is below the requirement, but who would qualify based on grade point performance from the most recently completed full-time semester are especially encouraged to apply for provisional admittance.

During the freshman and sophomore years the honors participant must maintain an overall grade point average of at

least 3.0 to remain in good standing in the program; the minimum grade point average for continuing at the junior and senior levels is 3.25. There is provision for a one-semester probationary period before a participant is discontinued. Provisionally admitted students must maintain the 3.00 or 3.25 in each semester of Honors enrollment as long as their overall grade point average continues to be below the requirement for regular admittance to the program. A minimum grade of B is required in each honors course for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a B.

Curriculum and Requirements

The Honors curriculum includes Honors sections of general education courses and other courses that fulfill special BA/BS requirements (for students pursuing the Bachelor of Arts or Bachelor of Science degrees). Honors programs offered by some major departments also offer special Honors sections of courses required for the major. Honors sections have the advantage of small class size, specially selected faculty, teaching that emphasizes student participation, and assignments that encourage students to think independently. Students should consult the *Schedule of Classes* each semester for the roster of UNHP courses and departmental Honors sections and for the University Honors Program discussion in the descriptive section of the schedule, which follows the alphabetical listing of courses by department. Complete information, including course descriptions, is available directly from the Honors office.

In addition to Honors sections of regularly offered courses, the Honors Program also offers courses designed specifically for Honors students. Courses carrying the UNHP prefix are designed for students pursuing the Interdisciplinary Liberal Arts Honors curriculum or the Honors Certificate. Department and college Honors programs may also design special Honors courses; these courses usually are offered to majors only, but in some cases are open to other Honors students as well.

Students also may earn Honors credit through participation in co-curricular programs; by designing their own special projects based on independent study, field work, or an internship experience (see UNHP 2900 and 4900 course descriptions); or by contracting for special projects within the context of a regularly scheduled course not officially offered as an Honors course. Within limits defined below, credit earned in these ways counts toward the Honors Certificate and may count toward other Honors options. Detailed information about earning Honors credit through these approaches is available in the Honors office.

THE HONORS CERTIFICATE: The Honors Certificate typically is based on credit for Honors sections of general education courses, but some credit toward the certificate may be earned in other ways. Requirements include the completion of 12 hours of Honors course work and the Honors Forum. (See UNHP 1100 for course description of Honors Forum.) Students are encouraged to pursue the Certificate during the freshman and sophomore years, but requirements may be completed at any point in the student's career. Students must have a 3.25 cumulative grade point average and a 3.25 average for Honors hours upon fulfillment of requirements to qualify for the certificate. "C" grades do not earn Honors credit, nor do they count toward the Honors Certificate.

The following stipulations apply to the Honors Certificate:

1. Students may earn Honors credit for courses that count toward their majors, but unless these courses also earn general education or BA/BS credit, no more than three hours credit toward the certificate will be awarded for Honors work within the major.
2. No more than three hours credit may be earned on a contract basis.
3. No more than three hours credit may be earned through UNHP 2900 or UNHP 4900.

DEPARTMENT AND COLLEGE HONORS PROGRAMS: Some academic departments offer honors programs based on work in the major. Departments in the College of Business offer a college-wide program for students pursuing the Bachelor of Business Administration, and the College of Education offers students the opportunity to earn Honors distinction through special projects and independent study. Generally speaking, students must have a 3.25 cumulative grade point average to pursue and receive department or college Honors. Consult the specific department or college listing in this catalog for detailed requirements, or contact the Honors Program office for a listing of departments offering Honors work in the major.

The Interdisciplinary Liberal Arts Honors Program, which features interdisciplinary work outside the major department, also includes work within the major as a special emphasis for completion of program requirements.

THE INTERDISCIPLINARY LIBERAL ARTS HONORS PROGRAM: Open to students in most majors (including students also pursuing department or college Honors), the Interdisciplinary Liberal Arts Honors Program enriches the liberal education component of the Bachelor's degree. Since Honors students have a special potential to contribute to the discussion of public issues, regardless of their major, Liberal Arts Honors places strong emphasis on preparing students for citizenship and engagement in public discourse. This theme is the organizing principle for Interdisciplinary Liberal Arts Honors. An additional emphasis within the major, including participation in an individually designed Honors project and writing an Honors thesis, complements the interdisciplinary theme.

Students may pursue and earn Liberal Arts Honors if they have a 3.25 cumulative grade point average. It is not necessary to have earned the Honors Certificate to pursue Liberal Arts Honors. This program requires 18 hours of course work, some of which may count toward Bachelor of Arts, Bachelor of Science, or general education requirements; some of which may count toward major requirements; and some of which will be part of the student's elective hours. Applicability of UNHP courses designed for Interdisciplinary Liberal Arts to general education and to B.A. and B.S. requirements is periodically evaluated. Information on current applicability for specific courses is available through the Honors Office. The distribution of course requirements is described below.

1. UNHP 3000: *Human Communities* (3 hours)
2. Interdisciplinary Seminars (9 hours)

   Three additional three-credit-hour interdisciplinary seminars, at least one from each of three different categories. Categories are based on the shell course concept. Shell courses specify goals and identify common concepts for the course, but specific topics vary from semester to semester.

   a. UNHP 4101-4199: *Contemporary Issues*
   b. UNHP 4201-4299: *Cross-Cultural Perspectives*
   c. UNHP 4301-4399: *Science and Technology*
   d. UNHP 4401-4499: *Interdisciplinary Special Topics*
3. Honors Experience in Major (3 hours)

   A specially designed Honors experience in the context of the major. May include special methodological experiences, internships, tutorials and readings, creative projects, applied projects such as evaluation research or investigative case studies, or enrollment in selected graduate courses. These courses typically will be offered with a departmental prefix and number, but UNHP 4900: *Advanced Honors Projects*, may be used in the absence of an appropriate departmental listing.
4. UNHP 4999: *Honors Thesis* (3 hours)

   In conjunction with a faculty mentor from the student's major department. Guidelines for students and faculty are available from the Honors Program Office. The Honors Program also conducts workshops for students undertaking the thesis. Students will register for the thesis in UNHP 4999 or the appropriate departmental course.

THE INDIVIDUAL THEMATIC HONORS PROGRAM: The Individual Thematic Honors Program is an upper division Honors program option open to students in all majors. The Individual program enables students to propose a theme and design their own Honors program by selecting courses from different departments that apply to the chosen theme. The Individual Thematic Honors Program recognizes the interdisciplinary nature of contemporary fields of inquiry, where ideas, issues, and problems can benefit from the perspectives of more than one discipline. Individual Thematic Honors programs will have individual titles to be listed on the student's transcript.

Students may pursue and earn Individual Thematic Honors if they have a 3.25 cumulative grade point average. The Individual Program requires 18 hours of upper division coursework, with 12 hours to be selected from honors sections of department or general education courses, courses offered by the Interdisciplinary Liberal Arts Honors Program (see description above), or honors contracts for

other courses. Courses selected to fulfill this 12 hour component of the Individual program may also be applied to general education, major, or other degree requirements as appropriate. The remaining six hours required for this eighteen hour program include a three hour individually designed independent study that encourages students to integrate concepts from the other courses and a three hour honors thesis.

Individual Thematic Honors requires a proposal explaining the thematic rationale and discussing the selected courses that will apply to the program. The application is designed with the guidance and approval of a faculty mentor who will also work with the student on the three hour independent study and three hour Honors thesis. The proposal must be approved by the Honors Council. For more information consult with the Honors Director and obtain the guidelines and application form for the Individual Thematic Honors Program. (Note: Where a department/college Honors option is unavailable to students in particular majors, Individual Thematic Honors proposals may also be based on thematic work within a particular department.) The distribution of course requirements is described below.

1. Twelve hours of Honors courses selected by the student as appropriate to the program theme. Will typically be four courses chosen from upper division general education Honors sections, department Honors courses, Interdisciplinary Liberal Arts Honors courses (see description for Interdisciplinary Liberal Arts Honors above), and other courses for which the student will contract for Honors credit.
2. An individually designed independent study that enables the student to integrate concepts from the other courses as they apply to the course theme. Independent study awards three hours credit and may be based on readings, field work, or research as appropriate to the Individual Thematic Honors emphasis. Students may register for the independent study courses offered by their major department if appropriate or may register for UNHP 4900 Honors Projects for three hours credit to fulfill requirement.
3. An Honors thesis for three hours credit, conforming to the expectations for the Honors thesis as outlined by the University Honors Program. Students will register for UNHP 4999 Honors Thesis or an equivalent department course.

Course Descriptions

Descriptions of the college and departmental programs are found with the appropriate major and degree descriptions.

UNIVERSITY HONORS PROGRAM (UNHP)

1100. The Honors Forum. (1). Features series of weekly presentations by faculty, community leaders, and guest performers. Designed to expose students to wide range of scholarly, cultural, and political issues and pursuits that are part of university life. Required for the Honors Certificate. Students pursuing the certificate are encouraged to enroll in the forum as soon as possible. (S/U).

2400-2499. Special Topics. (1-3). To accommodate student interests and faculty inspiration. May feature scholars-in-residence, museum exhibits, or other timely opportunities. Innovation in content and format encouraged. Counts toward Honors Certificate. *May be repeated for credit as topics vary. May not be repeated to improve a former grade.*

2900. Honors Projects. (1-3). To serve interests of individuals or small groups of students working collaboratively. Students encouraged to design their own projects or may pursue credit for Honors Projects in conjunction with "mini-seminars." May include reading, research, discussion group, or experiential projects. Credit varies according to project. Application to department and college honors programs at their discretion. *No more than 3 hours may apply toward Honors Certification. May be repeated for credit; however, maximum credit allowed for any combination of 2900 and 4900 is 9 hours.* (S/U).

3000. Human Communities. (3). Explores relationship among individuals and groups and between individuals and society. Concepts include theories of social order and change; social contract; concept of ethics; theories of market and state; concepts of cultural pluralism, human rights, and individual responsibility. Required for Interdisciplinary Liberal Arts Honors or may apply to Honors Certificate.

4100-4199. Contemporary Issues. (3). Selected contemporary issues to be approached in terms of demographic, social, economic, political, cultural, and historical dimensions. Perspectives from social sciences and humanities. Emphasis on social policies as problem solving strategies. Varied topics based on broad thematic areas such as public education; race and ethnic relations; criminal justice system; religion in public life; role of media in political discussion. May be selected as option for Interdisciplinary Liberal Arts Honors or may apply to Honors Certificate. *May be repeated for credit as topics vary. May not be repeated to improve a former grade.*

4201-4299. Cross-Cultural Perspectives. (3). Emphasis on global environment. Area study or thematic approach with consideration of demographic, social, economic, political, cultural, and historical dimensions. Perspectives from social sciences and humanities. May include such topics and areas as concept of the Third World, the non-western mind, the Middle East, Eastern Europe, Japan, or post-colonial Africa. May be selected as an option for Interdisciplinary Liberal Arts Honors or may apply to Honors Certificate. *May be repeated for credit as topics vary. May not be repeated to improve a former grade.*

4301-4399. Science and Technology. (3). Emphasis on relationship between science and technological innovation on the one hand and ethics, values, and public policy on the other. Includes basic science content suitable for non-science majors, as well as perspectives from social sciences and humanities. May include varied topics such as environmental issues, biomedical engineering, space program, artificial intelligence, human factors analysis, the mind and the brain. May be selected as an option for Interdisciplinary Liberal Arts Honors or may apply to the Honors Certificate. *May be repeated for credit as topics vary. May not be repeated to improve a former grade.*

4401-4499. Interdisciplinary Special Topics. (3). Themes and topics that lend themselves to interdisciplinary discussion and analysis. Emphasis on texts and primary sources, as well as innovative teaching formats. May be team taught by faculty from two or more disciplines. May be selected as an option for Interdisciplinary Liberal Arts Honors or may apply to Honors Certificate. *May be repeated for credit as topics vary. May not be repeated to improve a former grade.*

4900. Advanced Honors Projects. (1-3). Designed for individuals or small groups of students working collaboratively. Students encouraged to design own projects. May include reading, research, discussion group, or experiential projects. Advanced projects assume sufficient background for advanced level. Credit varies according to project. *No more than 3 hours may apply toward Honors Certificate.* Application to department and college honors programs at their discretion. Application to Interdisciplinary Liberal Arts Honors negotiable. Letter grade unless student application for credit/no credit approved before registration. *May be repeated for credit; however, maximum credit for any combination of UNHP 2900 and 4900 is 9 hours. May not be repeated to improve a former grade.*

4999. Honors Thesis. (3). (4300). In conjunction with a faculty mentor, most often from student's major department. Guidelines for students and faculty and applications available from Honors Office. Required for Interdisciplinary Liberal Arts Honors. Preliminary applications should be completed two semesters in advance. Formal applications due before final examinations week in semester preceding semester in which credit sought. Letter grade unless student application for credit/no credit approved before registration. *Honors credit requires grade of A or B. May not be repeated to improve a former grade.*

SCHOOL OF AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

http://www.ausp.memphis.edu/

AUDIOLOGY AND SPEECH PATHOLOGY (AUSP)

4100-6100. Introduction to American Sign Language. (3). Introduction to structure of American Sign Language. Includes manual alphabet and basic vocabulary. Practical applications in communication with deaf individuals and in signing in the performing arts.

4200-6200. Introduction to Communication Disorders. (3). Overview of communication disorders in children and adults. Specific disorders including stuttering, articulation, hearing impairment, aural rehabilitation, aphasia, cerebral palsy, autism, and language-learning disabilities. Recommended for students interested in pursuing careers in speech-language pathology, audiology, special education, education, psychology, social work or allied health.

INTERDISCIPLINARY STUDIES

INTERDISCIPLINARY STUDIES (INTD)

The following courses, INTD 2100, 4100-4110, and 4120-4130, compose part of the Interdisciplinary Environmental Program described under the College of Arts and Sciences. Before offering any of these courses, an instructor must gain approval from the university's Environmental Research, Issues, and Programs Committee (213 Mitchell Hall; 901-678-2253).

2100. Introduction to Environmental Studies. (3). Interdisciplinary environmental science course that integrates material from the physical, natural and social sciences including ecosystems, land and water resources, population dynamics and control, pollution, and environment and society.

4100-4110. Topics in Biological-Physical Environmental Studies. (3). Biological-Physical environmental topics course. Each offering of this course must be approved by the Environmental Research, Issues, and Programs Committee. *A student may repeat this course when the topics are different, but may not receive more than a total of 6 hours credit for 4100-4110.*

4120-4130. Topics in Socio-Behavioral Environmental Studies. (3). Socio-behavioral environmental topics course. Each offering of this course must be approved by the Environmental Research, Issues,

and Programs Committee. *A student may repeat this course when the topics are different, but may not receive more than a total of 6 hours credit for 4120-4130.*

THE UNIVERSITY OF MEMPHIS LIBRARIES

PROFESSOR
LESTER POURCIAU, Ph.D., *Director*
Room 203, McWherter Library

U of M LIBRARIES (LBRY)

2010. Introduction to the Use of Library Resources. (3). Introduction to organization of academic library material; emphasis on bibliographic access to information. Lectures and assigned research problems to acquaint student with general and specialized methods of access to library material.

3900-09. Special Topics in Library Information. (3). Topics varied and announced in *Schedule of Classes. May be repeated when topic varies.*

ORIENTATION PROGRAM

SUSAN MAGUN-JACKSON, Ph.D.,
Director
Room 203, Administration Building

ORIENTATION PROGRAM (ACAD)

The Orientation Program offers a 3-hour credit course for entering freshmen only. This course has been specially designed to assist freshmen in making the transition to higher education by introducing them to the expectations and opportunities provided by the university.

1100. Introduction to the University. (3). History, philosophy, and principles of higher education, with emphasis on The University of Memphis. Special attention to developing student skills necessary to meet the intellectual expectations of the university. *OPEN TO FRESHMEN ONLY.*

REMEDIAL AND DEVELOPMENTAL STUDIES

SUSAN MAGUN-JACKSON, Ph.D.,
Director
Room 203, Administration Building
http://www.people.memphis.edu/~dstudies

The Remedial and Developmental Studies Program at The University of Memphis permits students to enroll in special remedial/developmental level courses to develop the academic competencies necessary for success in college level courses. Major components of the program include testing and placement in appropriate level courses.

ADMISSION TO THE PROGRAM (PLACEMENT)

Students admitted to The University of Memphis as beginning freshmen may be required to take various placement tests to determine if they have the appropriate academic skills to successfully complete college level courses. Depending on the results of these tests, students may be required to take one or more Remedial/Developmental Studies courses. The following regulations regarding placement tests and course enrollment will apply:

First-time freshmen admitted with an ACT composite score less than 19 (SAT total score less than 890), an ACT mathematics subscore less than 19 (SAT quantitative score less than 450), an ACT English subscore less than 19 (SAT verbal score less than 460), or no ACT (SAT) score, are required to take appropriate components of the AAPP course placement test as a condition of enrollment, and to enroll in the courses indicated by the test results.

An advisor in the Academic Counseling Unit or the Developmental Studies Office should be consulted regarding the test scores and placement.

Testing is also required of students whose ACT (SAT) scores are more than 3 years old, transfer students with fewer than 60 semester hours and no college level credit in math or English, non-degree seeking students before enrollment in math or English, students with high school unit deficiencies in algebra or English, and students with GED scores.

Students placing in Remedial/Developmental Studies courses must enroll in and begin each subject-area sequence at the level indicated by the test results and complete that particular sequence before enrolling in the subsequent Level I (college level) course.

Enrollment in any Remedial/Developmental Studies (R&DS prefix) course is restricted to students who have taken the appropriate AAPP test. Self-placement without testing is not permitted.

RETESTING

Approval for retesting will be made only in extenuating circumstances and at the discretion of the Developmental Studies Program Director. Retesting must take place prior to university enrollment, but not within 90 days of initial testing.

CREDIT

Each Remedial/Developmental Studies course carries 3 semester hours of non-degree level credit.

The credit will count in the calculation of full-time status and the undergraduate joint (UJ) grade point average, and toward eligibility for athletics, financial aid, scholarships, and housing.

FEES

Fees for Remedial/Developmental Studies courses are the same as those for college level courses.

ACADEMIC ADVISING

Students requiring Remedial/Developmental Studies testing or courses should be advised in the Academic Counseling Unit, Room 107, Scates Hall.

COURSE GRADES AND CLASS ATTENDANCE

The grading scale for Remedial/Developmental Studies courses is A, B, C, F. No audit students will be permitted. Regular class attendance is mandatory and will be used in determining semester grades.

TWO-ATTEMPT RULE

A student who fails after two attempts to complete a Remedial/Developmental Studies course with a grade of C or better will be suspended from the university for one regular semester (spring or fall). Drops, withdrawals, and F grades count as unsuccessful attempts.

Students who believe that extenuating circumstances justify a third attempt without suspension should contact the Developmental Studies Office regarding the appeals process. In the case of an appeal the burden of proof for any extenuating circumstances will rest with the student. Other matters which will be taken into consideration in an appeal include current grade point average, class attendance, instructor recommendation, performance in other Remedial/Developmental Studies courses, and recommendations of student support services staff. Students failing to meet exit criteria after the third attempt will be suspended from the university.

ADD/DROP AND WITHDRAWAL

All students in Remedial/Developmental Studies courses wishing to drop a course or withdraw from the university after the end of the registration period must make an application to the Program Director within the normal university deadlines as stated in the "Semester Calendar." Approval for course add/drops or withdrawals will be made at the discretion of the Developmental Studies Program Director.

Course Descriptions

REMEDIAL AND DEVELOPMENTAL STUDIES (R&DS)

Enrollment in R&DS courses is restricted. Students should see an advisor in the Academic Counseling Unit. See the description of the Remedial/Developmental Studies Program which immediately precedes this course listing.

0710. Basic Composition. (3). (ASDS). Practice in developing paragraphs and compositions. Extensive work on basic competencies in grammar and mechanics. Numerous writing assignments. *Three lecture hours per week. Credit earned will not apply toward degree credit.*

0720. Basic Mathematics. (3). (ASDS). Real numbers and number operations, ratio and proportion, percent, measurement, geometry, variables, equations, and applications. *Three lecture hours per week. Credit earned will not apply toward degree credit.*

0740. Critical Reading I. (3). (ASDS). Essential reading skills needed as foundation for critical reading skills; emphasizes word attack skills, general vocabulary development, comprehension, and increased reading rate. *Three lecture hours per week. Credit earned will not apply toward degree credit.*

0810. Developmental Composition. (3). (ENGL 1100, ASDS 0810). Expository writing; emphasis on focus, development, and revision of short essays; review of problem areas of grammar, sentence style, and punctuation. *Three lecture hours per week. Credit earned will not apply toward degree credit.*

0820. Elementary Algebra. (3). (MATH 1000, ASDS 0820). Real numbers, their properties, variables, solving equations, polynomials, factoring, introduce algebraic fractions, linear equations, systems of linear equations, graphing linear equations in two variables, inequalities, radicals, quadratic equations, and applications. *Three lecture hours per week. Credit earned will not apply toward degree credit.*

0821. Intermediate Algebra. (3). (MATH 1100, ASDS 0821). First degree equations, linear equations in two variables, polynomials, rational expressions, exponents and radicals, systems of equations, graphing linear equations, inequalities, and applications. *Three lecture hours per week. Credit earned will not apply toward degree credit.*

0830. Developmental Study Skills. (3). (ASDS). Necessary reasoning and study skills for college level work; emphasizes critical thinking skills and efficient study techniques. *Three lecture hours per week. Credit earned will not apply toward degree credit.*

0840. Critical Reading II. (3). (ELED 1201, CIED 1201, ASDS 0840). Critical reading skills prerequisite for comprehension of college texts; emphasizes increased development of general vocabulary as well as technical and specialized vocabularies. Comprehension with special attention directed toward critical reading skills and improvement of reading flexibility and reading rate. *Three lecture hours per week. Credit earned will not apply toward degree credit.*

8. FACULTY AND STAFF

UNIVERSITY ADMINISTRATION

V. LANE RAWLINS, Ph.D., *President*

J. IVAN LEGG, Ph.D., *Provost*

R. EUGENE SMITH, Ph.D., *Vice President for Business and Finance*

SAMUEL B. LONG, III, B.A., *Vice President for Advancement*

DONALD K. CARSON, Ph.D., *Vice President for Student Affairs and Vice Provost for Enrollment Services*

RONNIE N. SUTTON, Ed.D., *Assistant Vice Provost for Enrollment Services*

DORIS R. KIRBY, J.D., *Assistant to the President, Legal*

DEBORAH W. BAKER, B.A., *Interim Director of University Community Relations*

LINDA L. BRINKLEY, Ph.D., *Vice Provost for Research and Dean, Graduate School*

SIDNEY A. McPHEE, Ph.D., *Vice Provost for Academic Affairs*

VAN N. OLIPHANT, D.B.A., *Interim Vice Provost for Extended Programs*

RALPH J. FAUDREE, JR., Ph.D., *Dean, College of Arts and Sciences*

DONNA M. RANDALL, Ph.D., *Dean, Fogelman College of Business and Economics*

RICHARD R. RANTA, Ph.D., *Dean, College of Communication and Fine Arts*

NATHAN ESSEX, Ph.D., *Dean, College of Education*

RICHARD C. WARDER, JR., Ph.D., *Dean, Herff College of Engineering*

TONI BARGAGLIOTTI, D.N.Sc., *Dean, Loewenberg School of Nursing*

H. RAMSEY FOWLER, Ph.D., *Dean, University College*

DONALD J. POLDEN, J.D., *Dean, Cecil C. Humphreys School of Law*

LESTER J. POURCIAU, JR., Ph.D., *Director of Libraries*

MARANELL K. SLUTSKY, M.Ed., *Director of Curriculum Planning*

DAVID L. SIGSBEE, Ph.D., *Director of General Education Program*

DAVID R. WALLACE, M.S., *Director of Admissions*

NOEL A. SCHWARTZ, M.A., *Registrar*

SUSAN MAGUN-JACKSON, M.S., *Director of Remedial and Developmental Studies and Director of Orientation Program*

THE COLLEGES AND DEPARTMENTS

THE COLLEGE OF ARTS AND SCIENCES

RALPH J. FAUDREE, JR., Ph.D., *Dean*

H. DELANO BLACK, Ph.D., *Associate Dean*

CALVIN H. ALLEN, JR., Ph.D., *Assistant Dean*

JOHN R. HADDOCK, Ph.D., *Director of Graduate Studies and Research*

KAREN THURMOND, M.A., *Assistant to the Associate Dean and Graduation Analyst*

FRANK M. DYER, JR., Ed.D., *Director, Arts and Sciences Advising Center and Academic Counselor*

MARCIA TAYLOR, B.S., *Assistant to the Dean*

DANIEL S. BEASLEY, Ph.D., *Special Assistant to the Dean*

CHARLENE ALLEN, M.A., *Academic Adviser*

JAMES M. KNIGHT, SR., Ph.D., *Academic Advisor*

AEROSPACE STUDIES

ROBERT N. HUTCHINGS, M.S., Lt. Col., USAF

Professor of Aerospace Studies

ROBERT A. BROOKS (1995), *Major, United States Air Force: Assistant Professor:* B.S., 1984, University of Arkansas; MAS, 1995, Embry-Riddle Aeronautical University

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1998-99 TENTATIVE CALENDAR

This calendar is tentative, and students should check the 1998-99 *Undergraduate Catalog* and the *Schedule of Classes* for possible changes and/or additions.

FALL SEMESTER 1998

REGISTRATION, FALL 1998: For detailed dates and times, see the *Schedule of Classes.*

AUGUST 31: Classes begin.

SEPTEMBER 7: Holiday: Labor Day.

SEPTEMBER 30: Last day for removing Summer Session "Incomplete" grades.

OCTOBER 10-13: Fall Break

OCTOBER 20: Last day to drop courses. Last day to withdraw from the university.

NOVEMBER 18: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in May 1999.

NOVEMBER 26-29: Holiday: Thanksgiving.

DECEMBER 9: Classes end.

DECEMBER 10: Study Day.

DECEMBER 11-17: Final examinations.

DECEMBER 19: Commencement.

SPRING SEMESTER 1999

REGISTRATION, SPRING 1999: For detailed dates and times, see the *Schedule of Classes.*

JANUARY 15: Classes begin.

JANUARY 18: Holiday: Martin Luther King's Birthday.

FEBRUARY 2: Last day for removing Fall "Incomplete" grades.

MARCH 4: Last day to drop courses.Last day to withdraw from the university.

MARCH 13-21: Spring Break.

APRIL 7: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in August 1999.

APRIL 28: Classes end. Faculty convocation.

APRIL 29: Study Day.

APRIL 30 - MAY 6: Final examinations.

MAY 7: Commencement.

FIRST SUMMER TERM 1999

REGISTRATION, SUMMER 1999: For detailed dates and times, see the *Schedule of Classes.*

JUNE 7: Classes begin.

JUNE 21: Last day for removing Spring Semester "Incomplete" grades.

JUNE 22: Last day to drop First Summer Term courses.
Last day for First Summer Term students to withdraw.

JULY 2: Holiday: Independence Day.

JULY 8: First Summer Term classes end.

JULY 9: First Summer Term final examinations.

SECOND SUMMER TERM 1999

REGISTRATION, SUMMER 1999: For detailed dates and times, see the *Schedule of Classes.*

JULY 13: Second Summer Term classes begin.

Last day to add or to register for Second Summer Term courses.

JULY 22: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in December 1999.

JULY 28: Last day to drop Second Summer Term courses.

Last day for Second Summer Term students to withdraw from the university.

AUGUST 12: Second Summer Term classes end.

AUGUST 13: Second Summer Term final examinations.

AUGUST 15: Commencement.

EXTENDED SUMMER TERM 1999

REGISTRATION, SUMMER 1999: For detailed dates and times, see the *Schedule of Classes.*

JUNE 7: Classes begin.

JUNE 21: Last day for removing Spring Semester "Incomplete" grades.

JULY 2-5: Independence Day and Summer Break.

JULY 13: Last day to drop Extended Summer Term courses.

Last day for Extended Summer Term students to withdraw from the university.

AUGUST 12: Extended Summer Term classes end.

AUGUST 13: Extended Summer Term final examinations.

AUGUST 15: Commencement.

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Urban Leisure Leadership, concentration, 113.
Veterans Services, 22.
Veterinary medicine, pre-professional, 48.
Volunteerism Office, Student, 26.
Withdrawal from the university, 34.
Wall Lockers, 32.
Web Group, 8.
Women's Studies: (B.L.S.), 141; (B.P.S.), 142.
Work-Study, Federal, 20.
Writing Intensive General Education Requirement, 40 (See advisor and particular degree and major requirements).

The University of Memphis

(formerly Memphis State University)

INSTRUCTIONS FOR COMPLETING THE APPLICATION AND PROCEDURES FOR UNDERGRADUATE ADMISSION

ALL APPLICANTS

This application form should be completed carefully by all applicants (except International Applicants who must use a different application) seeking admission to any undergraduate program. Applications for admission to the degree-seeking level must be submitted prior to August 1 for fall admission; December 1 for spring admission or May 1 for summer admission. **WHILE APPLICATION DEADLINES ARE LISTED ABOVE, REGISTRATION FOR NEW STUDENTS OCCURS MUCH EARLIER. FOR EXAMPLE, FALL NEW STUDENTS REGISTER IN JUNE.** Consideration of applications received after these deadlines will be in the non-degree or audit-only level explained below.

A five dollar ($5.00) non-refundable application fee is required for all applicants who have not previously applied to the University. Checks or Money Orders should be made payable to The University of Memphis. For detailed information regarding admission policies and requirements, refer to the appropriate pages of the current The University of Memphis *Bulletin*. Applications should be returned to this address:

Admissions Office
The University of Memphis
Memphis, Tennessee 38152

Transcripts, test scores and other academic credentials must be requested by the applicant from the issuing school, college, and/or agency and forwarded directly to the Admissions Office. Copies of such credentials accepted from the applicant or received by facsimile (fax) transmission **will be considered unofficial.**

DEGREE-SEEKING APPLICANTS

Designed for those persons who wish to earn an Undergraduate Degree from The University of Memphis.

Freshman (no previous college). Request a copy of your high school record. If your high school graduation is through the General Educational Development (GED) program, have these scores forwarded to the office. You must submit scores earned on the ACT or SAT examination for consideration. Entrance examination scores cannot be more than three years old at the time of enrollment.

Transfer. Request an official copy of your academic record from **each** college or university in which you have enrolled. Concealment of previous college attendance may be cause for rejection or cancellation of admission.

NON-DEGREE APPLICANTS

Designed for those persons who wish to take only a limited number of undergraduate courses and who are not presently seeking a degree at the University.

With No Previous College. Evidence of high school graduation from an approved high school is required for applicants not yet 21 years of age.

With Previous College. Request a statement of academic standing from the Registrar at the last college or university attended.

With College Degree. Request a statement indicating the degree earned and date awarded from the Registrar at that college or university.

AUDIT-ONLY APPLICANTS

Designed for those persons who do not wish to earn credit for course work. Permission to audit courses must be obtained from the appropriate department chairman prior to submitting the application.

INTERNATIONAL STUDENTS

The University is authorized under Federal law to enroll non-immigrant, alien students on "F-1" student visas. The established deadlines for applying are: May 1 for fall admission; September 15 for spring admission; or February 1 for summer admission. For additional information, and to obtain an International Application, contact the International Student Office. International applicants should **not** use this application.

THE ADMISSIONS OFFICE is located in Room 229 of the Administration Building. Office hours are 8:00 A.M. - 6:00 P.M. Monday through Thursday and until 4:30 PM Friday. The telephone number for general admissions information is (901) 678-2101. On Saturday mornings, the telephone number is (901) 678-2393.

UNDERGRADUATE ACADEMIC MAJORS

The University's six colleges offer baccalaureate degrees in 54 undergraduate majors and 73 concentrations as listed below.

College of Arts & Sciences

Anthropology ANTH
Biology BIOL
Chemistry CHEM
Criminology & Criminal Justice CJUS
Computer Science COMP
Economics ECON
English ENGL
- Literature
- Creative Writing
- Professional Writing
- Language and Linguistics
- English as a Second Language

Foreign Languages FRLG
- French
- German
- Russian
- Spanish
- Latin
- Greek

Geography and Planning GEOG
- Environmental and Earth Science
- Geographic Techniques
- Geography
- Meteorology
- Urban Planning

Geological Sciences GEOL
- Geology
- Geophysics

History HIST
International Relations ITRL
- American Foreigh Policy
- Western Europe
- Latin America
- Asia
- Soviet Union
- Africa and the Middle East

Mathematical Sciences MATH
- Mathematics
- Statistics

Philosophy PHIL
Physics PHYS
Political Science POLS
Psychology PSYC
Social Work SWRK
Sociology SOCI

Fogelman College of Business and Economics

Accounting ACCT
Business Economics BSEC
Finance FIN
International Business INBS
Logistics/Marketing LGMK
Management MGMT
Management Information Systems MIS
Marketing Management BKMT
Production Operations Management PROM
Real Estate RLES
Risk Management and Insurance RKIN
Sales SALE

College of Communication & Fine Arts

Art ART
- Art Education
- Ceramics, Painting, Sculpture, Printmaking
- Graphic Design
- Interior Design
- Photography

Art History ARTH
Commercial Music CMUS
- Music Business
- Recording Technology
- Jazz and Studio Performance
- Jazz and Studio Composition/ Arranging

Communication COMM
- Broadcast and Electronic Media
- Communication
- Film and Video Production

Journalism JOUR
- Advertising
- Broadcast News
- News Editorial
- Public Relations

Music MUSC
- Composition
- Music History
- Performance
- Sacred Music
- School Music (Intrumental), (Choral)

Theatre THEA
- Performance
- Dance
- Design and Technical Production

College of Education

Consumer Science Education CSED
- Dietetics
- Food Systems Management
- Home Economics Instruction
- Merchandising–Fashion
- Merchandising–Home Furnishings

Exercise and Sport Science EXSS
- Exercise Science and Health Promotion
- Physical Education

Human Development Learning HDVL
- Early Childhood Education (PreK-3 Licensure)
- Elementary Education (1-8 Licensure)
- Schools and Society (Non-Licensure)

Special Education SPED
Sport and Leisure Studies SLS
- Urban Sport Leadership
- Urban Leisure Leadership

The Herff College of Engineering

Civil Engineering CIVL
- Construction Engineering
- Environmental Engineering
- Foundation Engineering
- Structural Engineering
- Transportation Engineering

Electrical Engineering ELEC
- Computer Science
- Electrophysics
- Systems and Signals

Industrial and Systems Engineering INSE
Mechanical Engineering MECH
- Mechanical Systems and Designs
- Energy Systems
- Biomedical Systems

Architectural Technology ARCH
Computer Engineering Technology CETH
Electronics Engineering Technology EETH
Manufacturing Engineering Technology METH
- Mechanical Systems and Designs
- Energy Systems
- Biomedical Systems

The Loewenberg School of Nursing

Nursing NURS

The University College

Individual Studies INDS
Legal Assistant–Certificate LEGL

Pre-Professional Programs PREP

Pre-Cytotechnology
Pre-Dental Hygiene
Pre-Dentistry
Pre-Health Information Management
Pre-Law
Pre-Medical Technology
Pre-Medicine
Pre-Nursing
Pre-Occupational Therapy
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Podiatry
Pre-Veterinary Medicine

The University of Memphis

←Detach Here and Retain

WHAT TO EXPECT AS YOU ENROLL

ADMISSION

Administration Building, Room 229; Phone (901) 678-2101

- Submit your application for admission early, preferably **November 1** prior to a fall semester and **October 1** prior to a spring semester.
- You will receive an acknowledgment that we have received your application and fee.
- You will then be notified of required documents needed to process your application (also see the instructions on page one of this application).
- After all documents are received and the application has been processed, you will be notified of the admission decision.

SCHOLARSHIPS/FINANCIAL AID

Scates Hall, Room 312; Phone (901) 678-4825

- Submit all scholarship applications by **December 1** and complete all financial aid requirements by **January 31**. This will assure award notification before new student **Orientation - Advising - Registration** activities start in March.

PLACEMENT TESTING

Administration Building, Room 205; Phone (901) 678-2028

- After admission, some students will need to take a placement examination before choosing classes. The appropriate office will contact you if the test is required.

ORIENTATION-ADVISING-REGISTRATION

Administration Building, Room 159; Phone (901) 678-5513

- Registration for new students occurs during an **Orientation -Advising - Registration** program. Depending on your student classification, you will receive information on University programs, see an academic advisor, and register for your classes by using **"Stripes"**, our **Telephone Registration System**. You will be notified of your options for registration as soon as you have been admitted . Students who register early get the best schedules so you should complete all admission requirements as early as possible. **Orientation - Advising - Registration opportunities for the fall term begin in March each year.**

NOTE: Transfer credit will be evaluated as you schedule your orientation date. **All transcripts must be on file before transfer courses can be evaluated.**

FEE PAYMENT

Bursar's Office, Administration Building, Room 177; Phone (901) 678-2058

- You will receive a **statement of fees due** on or about **July 1** and **all fees must be satisfied by August 1** or your class schedule will be canceled. You may mail your fee payment to the Bursar at any time.

←Detach Here and Retain

The University of Memphis

(formerly Memphis State University)

APPLICATION FOR UNDERGRADUATE ADMISSION

Memphis, Tennessee 38152
(901) 678-2101

Please complete every item on both sides of this form, sign and date the application, and return it with a **$5.00 non-refundable undergraduate application fee unless the fee has been previously paid.**

U.S. SOCIAL SECURITY NUMBER If U.S. Social Security Number is unavailable, a student identification number will be assigned. The applicant must retain this number for access to their file.

___ ___ ___ — ___ ___ — ___ ___ ___ ___

For Office Use Only 206

Receipt Number:

FULL LEGAL NAME (Please print.) 2U6

Last First Middle Suffix

PERMANENT HOME ADDRESS 2U6/007

Street Address: _____

City: _____ State: _____ Zip: _____ Country: _____

(Area Code) Phone Number: _____ TN-County: _____

BIRTHDATE ____/____/____ **SEX** Circle One) Male Female **RACE** (Circle one below) 2U6

Asian or Pacific Islander Native American Indian Alaskan Native Black—not Hispanic Hispanic White

Are you a **CITIZEN** of the U.S.? (Circle one) Yes No

If no, what is your country of **CITIZENSHIP** and your VISA type? _____

Country VISA Type

PARENTS, GUARDIAN, SPOUSE, NEXT OF KIN (to notify in case of emergency) 2U6

Name _____

Street Address: _____

City: _____ State: _____ Zip: _____ Country: _____

(Area Code) Phone Number: _____ Relationship: (Circle one): Parent Guardian Spouse Other

For what term and year are you applying? (Circle one) Fall Spring Summer Year: ____

Are you seeking a degree from The University of Memphis? (Circle one) Yes No

If "Yes", indicate your planned major. **Please choose only majors listed on opposite page.**

(If undecided, please state "undecided".): _____

Do you plan to take coursework to transfer to another institution? (Circle one) Yes No

If "No", do you plan to take coursework for audit only? (Circle one) Yes No

How many semester hours of college work will you have earned by the time you attend this University? _____

Have you ever applied for undergraduate admission at this University? (Circle one) Yes No

(If yes, indicate Term and Year of last application: _____)

Have you ever taken undergraduate course work at this University? (Circle one) Yes No

(If yes, indicate Term and Year of last enrollment: _____)

Was your diploma awarded on the basis of **HIGH SCHOOL** graduation or the **GED** test? (Circle one) HS GED 208/209

What were your dates of attendance? Begin Month/Year ____/____ End (Grad) Month/Year ____/____

Name of High School _____ Location (City/State)? _____

If applicable, what date was the GED taken? Month/Year ____/____

Which **ENTRANCE EXAM(s)** have you taken? (Circle one) ACT SAT BOTH NONE Month/Year Taken: ____/____

Please print your name as it appears on your high school transcript:

Please complete the reverse side of this form.

DO NOT WRITE IN SPACE BELOW

Perm State	2U6
Perm Cntry	2U6
Citz Cntry	2U6
Ethnic Org	2U6
Relationship	2U6
NOK State	2U6
NOK Cntry	2U6
College	2U6
Degree	2U6
Major	2U6
Term	2U6
Req Rule	2U6
Residency	2U6
Class	2U6
AOI	2U6
Draft	2U6
Admiss Rep	2U6
TN-Reg Type	2U6
Admit Type	2U6
High Sch	209
GED	209
ACT	208
SAT	208
Changeover	208
C/O Prob	208

PREVIOUS COLLEGE/UNIVERSITY WORK

(List **ALL** previous colleges/universities, including The University of Memphis. If you require more space, please provide the information on an attached sheet. Official transcripts are required if you plan to pursue a degree. If no previous college work, write "NONE". **Concealment of previous college attendance may be cause for rejection or cancellation of admission.)**

Full Name of College 211	City & State	Dates of Attendance (From/To Month/Year)	Did you graduate? (Circle one)	If yes, Degree Earned & Date 212
		_____ - _____ (Month/Year) (Month/Year)	No Yes	
		_____ - _____ (Month/Year) (Month/Year)	No Yes	
		_____ - _____ (Month/Year) (Month/Year)	No Yes	
		_____ - _____ (Month/Year) (Month/Year)	No Yes	
		_____ - _____ (Month/Year) (Month/Year)	No Yes	

Please print your name as it appears on your transcripts:

DO NOT WRITE IN SPACE BELOW

College 211

College 211

College 211

College 211

College 211

College 211

College 211

RESIDENCY

STUDENTS WILL NOT GAIN RESIDENT CLASSIFICATION AT THE UNIVERSITY BY PRESENCE AS A STUDENT IN THE STATE OF TENNESSEE.

Have you always lived in Tennessee? (Circle one) Yes No. If no, when did you move to Tennessee? _____

Why did you move to Tennessee (for example, active duty military, employment, education, etc.)? _____

Do you plan to be a full-time or part-time student? (Circle one) Full-time Part-time

Are you employed? (Circle one) Full-time Part-time Not employed

If employed, provide name and address of employer below:

Place of Employment Dates of Employment City State Phone Number

SELECTIVE SERVICE CERTIFICATION

All male citizens of the United States of America between the ages of eighteen (18) and twenty-six (26) must be registered with the Selective Service prior to registering for classes at The University of Memphis. This requirement does not apply to veterans and others exempt by federal law. Indicate whether or not you have registered for the draft. (Circle one)

Yes No Exempt

Pursuant to the requirements of the College and University Security Information Act, Tenn. Code Ann. section 49-7-2200, an annual report of security information and statistics is available upon request. Contact the Assistant Dean of Students, Office of Judicial Affairs, UC, room 105, The University of Memphis, Memphis, Tennessee 38152, (901)678-2298 to obtain any or all of the information. All other Student-Right-To-Know information is available in the *Schedule of Classes* each term.

CERTIFICATION OF APPLICATION

I understand that if I am accepted as a student at this institution, there are certain performance tests I will be required to take during my academic career. I further understand that it is a requirement of admission that I agree to take any tests deemed necessary by the institution. In those instances where tests are administered by external entity, I hereby agree for the results of such tests to be released to the institution. The purpose of this requirement is to comply with the legislature's expressed intent that institutions regularly evaluate and improve instruction at all levels. I also understand that if I am under twenty-one years of age and required by institution policy to complete the Academic Assessment and Placement Program (AAPP) tests, my scores on these tests and course placement may be reported to my high school for research purposes. Any test scores will be treated confidentially as required by law.

I certify that none of the information on this form is false or has been withheld. I further certify that I understand that giving false information or withholding information may make me ineligible for admission or to continue my enrollment at The University of Memphis.

Signature _____ Date _____

Do Not Write Below This Line

STATEMENT OF PROCEDURE

All credentials become the property of the University and cannot be forwarded or returned.

NOTE: Credentials will be maintained in active files for a 12-month period. After this period, credentials will be relegated to inactive status and must be submitted again before an admissions decision can be made.

Admission Action:

Approved: _____ Date: _____

Not Approved: _____ Date: _____

The University of Memphis is one of 46 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. The Tennessee Board of Regents is the governing board for this system which comprises six universities, 14 community colleges and 26 area technology centers. The TBR system enrolls more than 80 percent of all Tennessee students attending public institutions of higher education.

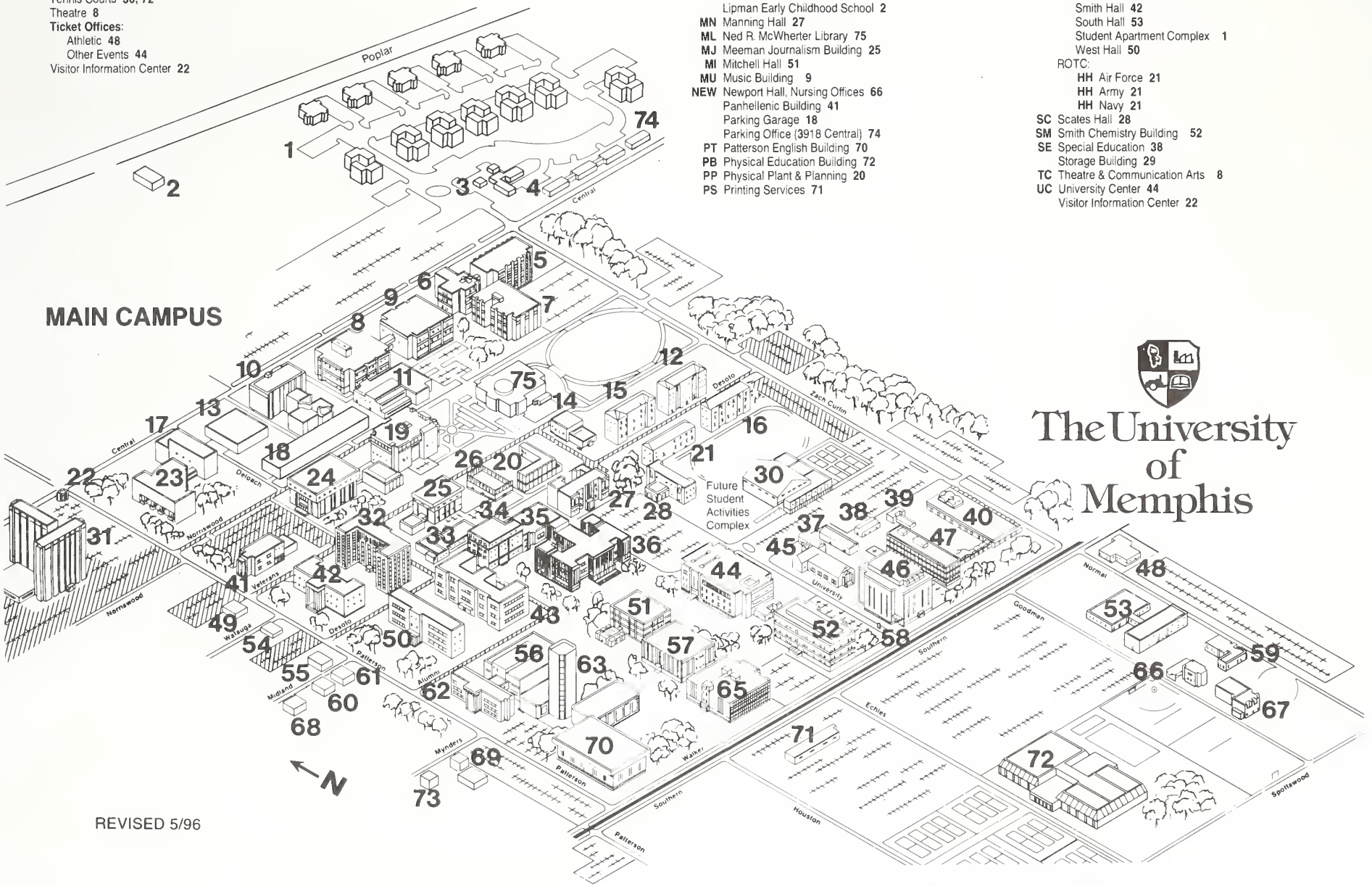
The University of Memphis offers equal educational opportunity to all persons without regard to race, religion, sex, creed, color, national origin or disability. The University does not discriminate on these bases in recruitment and admission of students or in the operation of any of its programs and activities, as specified by federal laws and regulations. The designated coordinators for University compliance with section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 are the Vice President for Student Affairs and the Equal Employment Compliance Officer. Information in this document will be provided in alternate format upon request. The University of Memphis is an Equal Opportunity/Affirmative Action University. It is committed to education of a non-racially identifiable student body. PS 6/95-1922

Art Museum **11**
Bookstore **44**
Cafeteria/Tiger Den **35**
Continuing Education **31**
Egyptian Institute **11**
Financial Aid **28**
Fogelman Executive Center **13**
Harris Auditorium **9**
Housing Office **31**
Human Resources **34**
Parking Office **74**
Post Office **34**
Public Safety **36**
Purchasing **56**
Tennis Courts **30, 72**
Theatre **8**
Ticket Offices:
Athletic **48**
Other Events **44**
Visitor Information Center **22**

A1 Annex I **38**
AB Art Building **33**
Athletic Office Building **48**
ED Ball Education Building **47**
BL Brister Library **56**
Cafeteria/Tiger Den**35**
CS Campus School**40**
CL Clement Humanities Building **57**
CFA Communication & Fine Arts **11**
Dormitories (see Residence Halls)
WD Dunn Mathematics & Foreign Languages Building **19**
EC,EC2,EC3 Earthquake Center **4**

FH Field House **30**
Fogelman College of Business & Economics:
BB Classrooms **23**
BO Offices **17**
FEC Fogelman Executive Center **13**
Gate House - Administration Parking Lot **58**
HH Hayden Hall **21**
HC Health Center **14**
Heating & Cooling Plant **26**
EL Herff College of Engineering **6**
LAW Cecil C. Humphreys School of Law **10**
JN Johnson Hall **62**
JO Jones Hall **34**
LS Life Sciences **46**
Lipman Early Childhood School **2**
MN Manning Hall **27**
ML Ned R. McWherter Library **75**
MJ Meeman Journalism Building **25**
MI Mitchell Hall **51**
MU Music Building **9**
NEW Newport Hall, Nursing Offices **66**
Panhellenic Building **41**
Parking Garage **18**
Parking Office (3918 Central) **74**
PT Patterson English Building **70**
PB Physical Education Building **72**
PP Physical Plant & Planning **20**
PS Printing Services **71**

Christian Student Center **54**
Jewish Student Union **68**
Muslim Student Center **73**
Newman Foundation - Catholic **69**
Wesley House - Methodist **60**
Westminster House - Presbyterian **55**
Residence Halls:
Browning Hall **12**
McCord Hall **15**
Mynders Hall **43**
Newport Hall **66**
Rawls Hall **32**
Richardson Towers **31**
Robison Hall **16**
Smith Hall **42**
South Hall **53**
Student Apartment Complex **1**
West Hall **50**
ROTC:
HH Air Force **21**
HH Army **21**
HH Navy **21**
SC Scates Hall **28**
SM Smith Chemistry Building **52**
SE Special Education **38**
Storage Building **29**
TC Theatre & Communication Arts **8**
UC University Center **44**
Visitor Information Center **22**



The University of Memphis

Bulletin of
The University of Memphis 1997-99
Memphis, TN 38152

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The University of Memphis
GREAT EXPECTATIONS

The University of Memphis is one of 46 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. It is an Equal Opportunity/Affirmative Action University committed to education of a non-racially identifiable student body.

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